

DEPARTMENT OF REGISTRATION AND EDUCATION



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1984 ILLINOIS REGISTERED NURSE SURVEY

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FOR

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AND

ILLINOIS DEPARTMENT OF REGISTRATION AND EDUCATION

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Abstract

As a result of an ammendment to the Illinois Nursing Act, Section 7.1, which became effective January 1, 1984, a survey of Illinois Registered Professional Nurses was conducted with the 1984 renewal of licenses. Surveys were mailed to 115,979 registrants, those with active Illinois licenses. 73,449 (63.3%) were returned and the data analyzed to answer the following seven questions posed by the Illinois Committee of Nurses Examiners:

- 1. Is there a significant relationship between the sex of the nurses and the individual's basic nursing education, highest degree held, type of employment, or field of employment?
- 2. Is there a significant relationship between the age of the nurse and the individual's basic nursing education, highest degree held, or employment status?
- 3. Is there a significant relationship between the residence or location of the nurse's employment and basic nursing education, highest degree held, current enrollment, and employment status?
- 4. Is there a significant relationship between the nurse's field of employment and basic nursing education or highest degree held either on a state-wide basis or within a given health service area?
- 5. Is there a significant relationship between the type of position held by a nurse and basic nursing education, highest degree held, or current enrollment on either a state-wide basis or within a given health service area?
- 6. Is there a significant relationship between the nurse's practice area and basic nursing education, highest degree held, or current enrollment on either a state-wide basis or within a given health service area?
- 7. Is there a significant relationship between the type of program in which a nurse is teaching and the highest degree held or current enrollment?

The data was analyzed using SPSS-X CROSSTABS and CHI-SQUARES to determine significance at the .01 level. In preparing the data, ages were computed from the year of birth and collapsed into age ranges and counties of residence and employment in Illinois collapsed into Health Service Areas, the health planning geographic boundaries for the State. Chicago was included with Cook and Dupage Counties although it is an HSA in and of itself.

Of those reporting, 83.4% were employed in nursing, 57.3% full-time and 28.1% part-time and 62,098 or 86% resided in Illinois with no more than 2% from any other one state. The respondents were 97.5% female and 2.5% male with 33.4% being 26 through 35 years of age, 27.5% 36 through 45, 18.1% 46 through 55 and 11.2% 56 through 65.

Significant relationships exist for Illinois nurses with respect to the following: (1) sex of the nurse and basic nursing education, highest degree held and type or field of employment; (2) age of the nurse and basic nursing education, highest degree held and employment status; (3) residence and location of employment and basic nursing education, highest degree held, current enrollment and employment status; (4) field of employment and basic nursing education and highest degree held; (5) type of nursing position held and basic nursing education, highest degree held and current enrollment; (6) practice area and basic nursing education, highest degree held and current current enrollment; and (7) type of nursing program in which teaching and highest degree held and current enrollment. The relationship between practice area and basic nursing education is not significant in HSAs 5, 9 and 10. HSA 10, the relationship between practice area and highest degree held is not Finally, the relationship between practice area and current enrollment is significant only in HSAs 3, 6/7, 8 and 11. With the majority of Illinois nurses being located in Cook and DuPage Counties, the data for this HSA, 6/7, generally reflected those for Illinois at large.

The basic nursing education held is highly reflective of the types of nursing education programs available within a given HSA. The majority of generic baccalaureate degree nursing education programs are located north of I-80, and correspondingly, there are higher percentages of nurses with basic preparation at the baccalaureate level in that section of Illinois. In the southern section of Illinois, the majority of programs are associate degree programs, and the majority of nurses in that area have the corresponding degree as their basic nursing preparation.

Nurses employed in nursing education tend to hold advanced degrees which is a reflection of the Rules for Administration of the Illinois Nursing Act. The other group most likely to hold advanced degrees are those nurses employed in nursing administration.

Registered Nurse Survey Report

As a result of an amendment to the Illinois Nursing Act, Section 7.1, which became effective January 1, 1984, a survey of registered nurses in Illinois was conducted with the licensure renewal in 1984. Surveys were distributed to 115,979 registrants with 73,449 (63.3%) returned and the data entered for analysis. Of those reporting, 83.4% were employed, 57.3% full-time and 26.1% part-time. This report contains statistical data from the survey to assist in defining the nursing population in Illinois and provide educators and employers with planning data related to registered nurses.

The following questions were identified as those to be answered by the survey:

- 1. Is there a significant relationship between the sex of the nurses and the individual's basic nursing education, highest degree held, type of employment, or field of employment?
- 2. Is there a significant relationship between the age of the nurse and the individual's basic nursing education, highest degree held, or employment status?
- 3. Is there a significant relationship between the residence or location of the nurse's employment and basic nursing education, highest degree held, current enrollment, and employment status?
- 4. Is there a significant relationship between the nurse's field of employment and basic nursing education or highest degree held either on a state-wide basis or within a given health service area?
- 5. Is there a significant relationship between the type of position held by a nurse and basic nursing education, highest degree held, or current enrollment on either a state-wide basis or within a given health service area?
- 6. Is there a significant relationship between the nurse's practice area and basic nursing education, highest degree held, or current enrollment on either a state-wide basis or within a given health service area?
- 7. Is there a significant relationship between the type of program in which a nurse is teaching and the highest degree held or current enrollment?

Sex of Illinois Nurses

One of the characteristics of Illinois nurses selected for investigation was the sex of nurses and its relationship with education and employemnt. Of those nurses responding, 97.5% identify themselves as female and 2.5% as male. While 58.7% of the female respondents indicate their basic nursing education as diploma, 42.3% of the males indicate diploma education as being their basic nursing preparation. Baccalaureate education as basic nursing preparation is more consistent for the two sexes, 22.6% for females and 27.4% for males. Analysis of the data related to the highest degree held by respondents indicates that males tend to be more likely to hold a degree than females, with 48.3% of the females and 26.8% of the males indicating no degree as being held. Table 1 represents the findings related to highest degree held and sex of the nurse respondents.

TABLE 1. RELATIONSHIP BETWEEN SEX AND HIGHEST DEGREE HELD BY ILLINOIS NURSES

| SEX | SAMPLE | | | HIGHES' | r degree | HELD | | |
|--------|--------|-------|-------|---------|----------|-------|-------|------|
| | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| · | | | | BACC | BACC | MAST | MAST | EDD |
| MALE | 1815 | 26.8% | 22.1% | 24.5% | 13.5% | 5.3% | 6.3% | 1.4% |
| FEMALE | 70441 | 48.3% | 16.3% | 21.9% | 6.6% | 4.3% | 2.1% | 0.4% |
| TOTAL | 72256 | 47.8% | 16.5% | 22.0% | 6.8% | 4.3% | 2.2% | 9.4% |

Chi-square=525.3, df=6, p<.01

There is a significant relationship between sex and the highest degree of education attained by the respondents. Males are more likely than females to hold a degree, either undergraduate and graduate.

Field of employment data with respect to the sex of the nurses in Illinois was also collected and analyzed in this survey. Both males and females identify the hospital as the most frequent field of employment, 88.6% and 74.7% respectively. Nursing homes are the second largest employment setting for both sexes, accounting for 7.0% of the female respondents site of employment and 4.4% of the male employment settings. While females identify office nursing as the third most frequent field of employment, males identify public health as third. School nursing is the least frequent field of employment for males, and private duty nursing is least frequently identified by females.

When the data related to type of position in which nurses are employed is analyzed, both males and females respond most frequently that they are

employed as general duty or staff nurses. The largest difference in responses is at the level of administrator where male responses are 7% greater than female. Consultative, instructor, and head nurse positions are identified relatively equally by both males and females.

Age of Illinois Nurses

A second general characteristic of Illinois Registered Nurses investigated was that of age and its relationship to nursing education and employment. Based on year of birth, respondents were divided into six age groups, up to 25 years of age, 26 to 30 years, 36 to 45 years, 46 to 55 years, 56 to 65 years, and over 65 years of age. One-third of the respondents indicate their age to be in the 26 to 35 year age bracket, 27.5% in the 36 to 45, 18.1% in the 46 to 55 and 11.2% the 56 to 65 year age brackets. The remaining 10% are in the 25 and under and over 65 year age brackets with the majority in the younger range.

According to the data, there is a gradual increase in the percentage of respondents whose basic nursing education was at the baccalaureate level as the age decreases, ranging from 7.3% of those over 65 to 38.4% of those 25 and under. While 90.9% of the respondents over 65 years of age identify diploma nursing education as their basic preparation, the percentage drops to 33.8% of those 25 years of age and under. Likewise, associate degree nursing education is most prevalent among those 35 years of age and under. Highest degrees held by nurses according to age bracket are shown in Table 2.

TABLE 2. RELATIONSHIP BETWEEN AGE AND HIGHEST DEGREE HELD BY ILLINOIS NURSES

| AGE | SAMPLE | | | | HIGHEST | DEGREE HI | ELD | |
|---------|--------|-------|-------|-------|---------|-----------|-------|------|
| | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| | | | | BACC | BACC | MAST | MAST | EDD |
| 00 - 25 | 4610 | 32.7% | 27.1% | 39.3% | 0.5% | 0.3% | 0.0% | 0.0% |
| 26 - 35 | 23549 | 32.7% | 24.1% | 32.0% | 4.9% | 4.9% | 1.2% | 0.2% |
| 36 - 45 | 19419 | 49.7% | 15.5% | 17.8% | 8.5% | 5.2% | 2.7% | 0.6% |
| 46 - 55 | 12784 | 59.3% | 9.6% | 13.6% | 9.0% | 4.3% | 3.5% | 0.6% |
| 56 - 65 | 7863 | 69.8% | 4.9% | 10.1% | 8.3% | 3.3% | 3.0% | 0.6% |
| OVER 65 | 2192 | 76.6% | 2.4% | 9.3% | 5.5% | 3.1% | 2.6% | 0.5% |
| TOTALS | 70417 | 33600 | 11609 | 15555 | 4753 | 3050 | 556 | 294 |

Chi-square 9539.2, df=30, p<.01

There is a significant relationship between the age of the respondents and their educational preparation for nursing. Younger nurses are more likely to

hold a degree while the older are more likely to have received no degree.

Over half of the respondents in all except the over 65 year old age range are employed full-time with this same group being approximately two-thirds unemployed. The distribution of nurses employed part-time is relatively even across the age groups including the 26 to 55 years olds with 25% to 30% of respondents in the respective three age brackets indicating part-time employment in nursing. In the other three age ranges, 13% to 20% of the respondents indicate part-time employment.

Table 3 illustrates the distribution of employment, full-time, part-time, and unemployed of the respondents by age.

TABLE 3. RELATIONSHIP BETWEEN AGE AND EMPLOYMENT STATUS OF NURSES IN ILLINOIS

| AGE | SAMPLE | EMPLOYMENT STATUS | | | | |
|-------|--------|-------------------|-----------|------------|--|--|
| | SIZE | FULL-TIME | PART-TIME | UNEMPLOYED | | |
| 00-25 | 4625 | 84.0% | 12.8% | 3.3% | | |
| 26-35 | 23710 | 59.7% | 29.5% | 10.8% | | |
| 36-45 | 19549 | 55.3% | 29.2% | 15.6% | | |
| 46-55 | 12876 | 60.0% | 24.3% | 15.7% | | |
| 56-65 | 7953 | 51.2% | 19.9% | 8.9% | | |
| 66-99 | 2311 | 15.8% | 17.5% | 66.8% | | |
| TOTAL | 71024 | 41009 | 18397 | 11618 | | |

Chi-square=7348.29, df=10, p<.01

There is a significant relationship between the age of nurses and their employment status with younger nurses more likely to be employed full-time than older nurses.

Location of Nurses

Respondents were asked to identify the county in which they resided and the one in which they were employed to provide information regarding the status of nurses in the various areas of Illinois. This county information was translated into Health Service Areas with Chicago, HSA 6, and Cook and Dupage Counties, HSA 7, being combined to result in 10 regions. The listing of Health Service Areas by county is found in Appendix A. As there was little difference between the county of residence and county of employment, the county of employment will be used in describing the relationships associated with the distribution of nurses in the various areas of Illinois.

Over half of the respondents reside and are employed in Cook and Dupage County, 51.3% indicating this as their residence and 54.1% as their location of

employment. This is the only area with 10% or more of the respondents indicating it as their residence or county of employment. These figures are reflective of the overall picture of the addresses identified for registered professional nurses in Illinois.

Table 4 provides information relative to the location of residence all registered nurses in Illinois as of January 1984 and the location of residence and employment of the respondent nurses.

TABLE 4. LOCATION OF RESIDENCE AND EMPLOYMENT OF NURSES IN ILLINOIS

| HSA | RESIDENCE EMPLOYMENT | | TOTAL | |
|-------|----------------------|-------------|----------|---|
| | RESPONDENTS | RESPONDENTS | ILLINOIS | · |
| 1 | 5.6% | 5.6% | 5.2% | |
| 2 | 7.0% | 7.2% | 6.9% | |
| 3 | 5.6% | 5.6% | 5.5% | |
| 4 | 6.6% | 6.7% | 6.5% | |
| 5 | 4.0% | 4.1% | 3.9% | |
| 6-7 | 52.3% | 51.3% | 54.1% | |
| 8 | 8.1% | 8.4% | 8.3% | |
| 9 | 4.3% | 4.6% | 3.3% | |
| 10 | 2.3% | 2.3% | 2.3% | |
| 11 | 4.2% | 4.2% | 4.0% | |
| TOTAL | 10,483 \ | 61.493 | 53,471 | |

Two additional items of information might contribute to the interpretation of the above table. When asked if licensed in another state, 18,385 of the respondents indicated they were. Second, 12,124 of the respondents indicate they are not employed in nursing. This data is relatively consistent with the difference between the numbers indicating a residence and those responding to the question regarding the location in which they are employed.

Of practical use is the data related to nursing education and location of employment as discussion is underway regarding the level of education required for entering practice as a professional nurse. Table 5 depicts the distribution of nurses according to their basic level of education of nursing education.

TABLE 5. RELATIONSHIP BETWEEN LOCATION OF EMPLOYMENT AND BASIC NURSING

| | EDUCATION | | | |
|-------|-----------|---------|-------|-------|
| HSA | SIZE | DIPLOMA | ADN | BACC |
| 1 | 2791 | 67.6% | 20.5% | 11.9% |
| 2 | 3644 | 67.2% | 22.0% | 10.8% |
| 3 | 2908 | 71.5% | 18.5% | 10.0% |
| 4 | 3477 | 66.2% | 18.4% | 15.4% |
| 5 | 2075 | 49.6% | 40.2% | 10.1% |
| 6 | 28699 | 50.3% | 18.3% | 31.4% |
| 8 | 4402 | 56.4% | 25.7% | 17.9% |
| 9 | 1745 | 61.6% | 24.1% | 14.3% |
| 10 | 1222 | 70.9% | 18.4% | 10.6% |
| 11 | 2142 . | 54.7% | 31.9% | 13.4% |
| TOTAL | 53105 | 29771 | 11109 | 12225 |

Chi-square=3233.04, df=18, p<.01

There is a significant relationship between the location of employment of nurses in Illinois and their basic nursing education. Nurses with basic nursing education of an associate degree are more frequently found in the southern areas of Illinois and those with baccalaureate preparation in the Chicago, Cook County, DuPage County area.

Overall 56.1% of the respondents received diploma nursing education as their basic preparation for nursing, 20.9% associate degrees, and 23.0% baccalaureate degrees. It is significant to note that 73.7% of those whose basic nursing education is a baccalaureate degree are in Cook and Dupage Counties. The smallest percentage of nurses with baccalaureate preparation as their basic nursing education is in HSA 10, Henry, Mercer, and Rock Island Counties where 1.1% of the respondents indicated the baccalaureate degree as their basic nursing education. Again, there was little variation in these results when the residence of the respondents was studied. These figures may be better understood in view of the location of nursing education programs in Illinois by their type as shown in Table 6. The data shown in the table are based on a May 1984 list of approved nursing education programs in Illinois.

TABLE 6. LOCATION OF ILLINOIS BASIC NURSING EDUCATION PROGRAMS BY TYPE OF

| | PROGRAM | | | |
|--------|---------|---------|-------------------|-----------------|
| HSA | SAMPLE | | BASIC NURSING EDU | CATION PROGRAMS |
| | SIZE | DIPLOMA | ADN | BACC |
| 1 | 7 | 2 | 4 | 1 |
| 2 | 7 | 3 | 3 | 1 |
| 3 | 4 | 2 | 1 | 1 |
| 4 | *5 | 2 | ***1(2) | 3 |
| 5 | **2 | 2 (9) | 0 | 0 |
| 6-7 | *35 | 12 | 13 | 12 |
| 8 | 3 | 0 | 3 | 1 |
| 9 | 5 | 1 | 2 | 2 |
| 10 | 3 | 2 | 1 | 0 |
| 11 | 5 | 0 | 4 | 1 |
| TOTALS | 76 | 24 | 34 | 22 |

^{*}Includes diploma program phasing into baccalaureate (shown under both)

Table 6 demonstrates a distribution of basic nursing education programs which finds 46.1% of the programs located in HSAs 6-7, Cook and DuPage Counties, and 59.2% north of I-80. Breaking this down by types of programs, 54.5% of the baccalaureate nursing education programs are located in Cook and DuPage Counties, 63.6% north of I-80. This accounts for 34.2% of the programs in HSAs 6-7 and 31.1% in the counties north of I-80. By contrast, in the HSAs in the southern sections of Illinois, HSAs 5 and 11, 85.7% of the programs are associate degree and 14.3% baccalaureate. There are no diploma programs in these two HSAs. In all of the HSAs south of I-80, 45.2% of the programs are associate degree and 25.8% baccalaureate. HSAs 5 and 10 have no generic baccalaureate nursing education programs. These areas include 30 counties in the southern section of Illinois and 3 in the west-central section of Illinois.

Data regarding the highest degree held by nurses in Illinois was also examined on a Health Service Area basis. Again, it should be noted that those nurses with no degree are equal to nearly half of the respondents, 47.7% on the basis of residence and 45.9% on the basis of location of employment. Table 7 presents the data regarding the geographic location of nurses in Illinois and their highest level of education.

^{**2} programs with multiple campuses--total campuses in parentheses

^{***}Includes satellite of one of the multiple campus programs in HSA 5

TABLE 7. RELATIONSHIP BETWEEN LOCATION OF NURSES AND HIGHEST DEGREE HELD BY
________ILLINOIS NURSES

| HSA | SAMPLE | | | HI | GHEST DEC | GREE HELD | 1 | | |
|-------|--------|-------|-------|-------|-----------|-----------|-------|------|--|
| | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ | |
| | | | | BACC | BACC | MAST | MAST | EDD | |
| 1 | 2795 | 58.9% | 19.0% | 11.9% | 4.7% | 3.7% | 1.5% | 0.4% | |
| 2 | 3650 | 59.6% | 20.2% | 11.2% | 4.6% | 2.8% | 1.5% | 0.2% | |
| 3 | 2914 | 61.1% | 16.6% | 12.0% | 6.6% | 1.8% | 1.8% | 0.2% | |
| 4 | 3483 | 57.0% | 16.3% | 14.6% | 6.6% | 2.7% | 2.4% | 0.4% | |
| 5 | 2083 | 40.4% | 35.8% | 12.9% | 7.2% | 2.2% | 1.2% | 0.3% | |
| 6-7 | 28713 | 39.4% | 15.3% | 29.3% | 7.6% | 5.6% | 2.4% | 0.3% | |
| 8 | 4404 | 46.2% | 22.5% | 17.3% | 8.7% | 3.0% | 2.2% | 0.1% | |
| 9 | 1749 | 50.8% | 21.2% | 14.5% | 7.7% | 3.9% | 1.4% | 0.5% | |
| 10 | 1224 | 64.1% | 16.9% | 12.2% | 2.3% | 3.3% | 1.1% | 0.5% | |
| 11 | 2144 | 45.6% | 27.5% | 16.1% | 5.7% | 2.4% | 2.3% | 0.5% | |
| STATE | | 45.9% | 18.1% | 22.2% | 7.0% | 4.3% | 2.1% | 0.4% | |
| COTAL | 53159 | 24422 | 9621 | 11782 | 3722 | 2285 | 1124 | 203 | |

Chi-square=3457.79, df=54, p<.01

There is a significant relationship between the location of employment of nurses in Illinois and their highest degree held with nurses from HSAs 3 and 10 least likely to hold a degree and nurses from HSAs 6 and 7 most likely to hold a degree, particularly the baccalaureate and masters in nursing. More than half of the nurses in HSAs 1, 4 and 9 hold no degree.

Approximately one-fourth of the respondents indicate current enrollment in educational programs. Of these, 34.1% are enrolled in baccalaureate nursing education programs and 19.5% in associate degree programs (no major specified). Another 14.6% of the respondents enrolled in current educational programs are enrolled in non-nursing baccalaureate programs.

A total of 19.9% of those currently enrolled in educational programs are in graduate programs of some type. The most frequent response in the type of graduate enrollment is nursing master's degree programs, 9.9% of those enrolled in any program. The percentages of respondent nurses enrolled in other types of graduate education are non-nursing master's degree, 7.4%, nursing doctorate, 0.8%, and non-nursing doctorate, 1.8%.

Table 8 illustrates the current enrollment pattern of nurses in educational programs in the various health service areas.

TABLE 8. RELATIONSHIP BETWEEN LOCATION OF ILLINOIS NURSES AND CURRENT

EDUCATIONAL ENROLLMENT

| HSA | SAMPLE EDUCATIONAL ENROLLMENT | | | | | | | |
|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|
| | SIZE | ADN | NURSE | OTHER | NURSE | OTHER | NURSE | OTHER |
| | | | BACC | BACC | MAST | MAST | DOCT | DOCT |
| 1 | 617 | 26.1% | 46.4% | 12.3% | 8.6% | 5.3% | 0.0% | 1.3% |
| 2 | 826 | 31.4% | 33.4% | 19.4% | 7.5% | 6.8% | 0.2% | 1.3% |
| 3 | 610 | 27.7% | 35.7% | 17.4% | 5.9% | 11.1% | 0.0% | 2.1% |
| 4 | 646 | 26.8% | 32.8% | 18.7% | 8.4% | 10.7% | 1.2% | 1.4% |
| 5 | 602 | 36.7% | 38.5% | 11.3% | 6.6% | 4.7% | 0.7% | 1.5% |
| 6-7 | 7766 | 18.3% | 39.3% | 16.5% | 13.6% | 8.8% | 1.2% | 2.3% |
| 8 | 1107 | 23.8% | 37.0% | 22.8% | 6.6% | 8.3% | 0.2% | 1.4% |
| 9 | 611 | 21.6% | 44.8% | 16.4% | 8.3% | 6.5% | 0.7% | 1.6% |
| 10 | 250 | 31.6% | 44.8% | 11.6% | 6.4% | 4.4% | 0.4% | 0.8% |
| 11 | 594 | 29.3% | 41.2% | 10.9% | 10.4% | 5.9% | 0.0% | 2.2% |
| STATE | | 22.4% | 39.0% | 16.5% | 11.0% | 5.9% | 0.9% | 1.9% |
| total | 12742 | 2279 | 5001 | 2974 | 1392 | 1952 | 238 | 1.06 |

Chi-square=493.0, df=54, p<.01

There is a significant relationship between the geographic area of employment and current enrollment in educational programs of nurses in Illinois with nurses in Cook and DuPage Counties and HSA 11 most likely to be pursuing nursing master's degrees. These areas do have the greatest access to programs offering a master's degree in nursing, Chicago and St. Louis. Nurses in HSAs 3 and 4 are most likely to be enrolled in master's degree programs with a non-nursing master's degree. In all areas nursing baccalaureate enrollment is the most prevalently identified by those nurses currently enrolled in educational programs.

The percentages for full-time, part-time, or unemployed of all respondents are 65.2%, 31.1%, and 3.7% respectively. HSA 5 varies the most from this pattern with 72.3% employed full-time and 24.1% part-time. Part-time employment is in the 39 to 40% range in 4 HSAs, 1, 8, 9, and 10. In these areas the part-time percentage is approximately 56%. Unemployment is relatively evenly reported with the primary variances in HSA 10 where it drops below 3% and HSA 1 where it exceeds 4%.

Field of Employment

Overall, 75.1% of the respondents identify their field of employment as being in a hospital, 70.5% of the diploma nurses, 84.4% of the associate degree and 77.9% of the baccalaureate nurses. Nurses whose basic nursing education was a diploma account for 52.7% of the hospital nurses with the remaining half being fairly evenly distributed between those whose basic nursing education was an associate or baccalaureate degree.

The second most frequent field of employment is nursing home identified by 6.9% of the respondents with diploma nurses accounting for 71.8% of the registered nurses employed in nursing homes. Nurses whose basic nursing education was a baccalaureate degree are the least frequently employed in nursing homes, 3.5% accounting for 11.9% of the registered nurses employed in nursing homes.

For nurses employed in nursing education, 53.0% are accounted for by nurses whose basic nursing education was a baccalaureate degree and 40.6% a nursing diploma. Overall, 2.8% of the respondents indicate nursing education as their field of employment.

While 1.5% of the respondents identify private duty as their field of employment, 0.8% of the baccalaureate degree nurses identify it as their field of employment with the other two groups approximating the overall picture. Diploma nurses accounted for 68.3% of the registered nurses employed in private duty with the remaining divided among the nurses whose basic nursing education was an associate or baccalaureate degree, 19.8% and 11.9% respectively.

Public health nursing is identified as the field of employment by 3.3% of the respondents. Nurses whose basic nursing education was a baccalaureate degree are most frequently employed in public health, 4.7%, with nurses whose basic nursing education was at the associate degree level the least frequently employed in public health, 2.3%. While 52.7% of the public health nurses have as their basic nursing education a diploma, 14.3% have an associate degree as their basic nursing education.

School nursing accounts for 2.4% of the nurses' specified field of employment. The pattern with respect to basic nursing education is similar to those in public health with 31.6% having a basic nursing education of a baccalaureate degree, 6.2% an associate degree and 61.3% a diploma. Less than one percent of the nurses whose basic nursing education is an associate degree are employed in school nursing while 3.2% of those whose basic nursing

education was a baccalaureate degree and 2.6% of those whose basic nursing preparation was diploma are employed in school nursing.

Nurses employed in industrial nursing account for 1.7% of the respondents with 2.4% of the nurses with a diploma as their basic nursing education, 0.8% of those with an associate degree and 0.6% of those with a baccalaureate degree being employed in industrial nursing. The industrial nursing field is represented by 81.5% nurses with basic nursing education of a diploma, and the remainder evenly split between those whose basic preparation was an associate or baccalaureate degree.

Office nursing was the third most frequently identified field of employment with 6.4% of the respondents being employed in office nursing. Again, nurses with a basic nursing education of a diploma most frequently identify office nursing as their field of employment, 2.4% of the diploma nurses accounting for 76.4% of the office nurses. Nurses whose basic nursing preparation is an associate degree are employed as office nurses 4.1% of the time accounting for 13.1% of the office nurses, and those whose basic nursing education was a baccalaureate degree account for 10.5% of the office nurses having selected this field 2.9% of the time.

Table 9 gives a summary of field of employment by highest degree held.

TABLE 9. RELATIONSHIP BETWEEN FIELD OF EMPLOYMENT AND HIGHEST DEGREE HELD BY

| ······································ | ILLINOI | S REGISTER | RED NURSES | | | | | |
|--|----------------------------|------------|------------|-------|-------|-------|-------|------|
| FIELD | SAMPLE HIGHEST DEGREE HELD | | | | | | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| EMPLOY | | | | BACC | BACC | MAST | MAST | EDD |
| HOSPITAL | 44799 | 44.1% | 20.2% | 24.7% | 6.2% | 3.1% | 1.5% | 0.2% |
| NURSING | | | | | | | | |
| HOME | 4115 | 63.8% | 15.0% | 13.0% | 5.7% | 1.0% | 1.4% | 0.0% |
| NURSING | | | | | | | | |
| EDUCATION | 1667 | 3.3% | 0.7% | 21.1% | 2.9% | 55.4% | 8.2% | 8.5% |
| PRIVATE | | | | | | | | |
| DUTY | 900 | 60.6% | 18.4% | 12.7% | 5.6% | 1.1% | 1.3% | 0.3% |
| PUBLIC | | | | | | | | |
| HEALTH | 1986 | 35.9% | 10.1% | 32.7% | 10.9% | 5.9% | 4.2% | 0.3% |
| SCHOOL | | | | | | | | |
| HEALTH | 1415 | 32.5% | 4.5% | 26.1% | 23.4% | 3.1% | 10.2% | 0.2% |
| INDUSTRY | 1005 | 70.3% | 8.8% | 9.4% | 9.4% | 0.9% | 1.3% | 0.0% |
| OFFICE | 3815 | 69.6% | 12.6% | 12.4% | 4.1% | 0.8% | 0.4% | 0.1% |
| TOTAL | 10672 | 27541 | 10672 | 13664 | 3906 | 2573 | 1120 | 226 |

Chi-square=18390.6, df=42, p<.01

There is a significant relationship between field of employment and the highest degree held by nurses. While diploma nurses account for the greatest percentage of nurses in all fields of employment except nursing education, nurses with master's degrees in nursing account for the majority of nurses employed in nursing education. Nurses with baccalaureate degrees, nursing and non-nursing, account for approximately one-half of the nurses employed in school health and 44% of those employed in public health. Doctorally prepared nurses account for less than one percent of those employed in all fields with the exception of nursing education. Likewise, associate degree nurses account for less than one percent of those employed in nursing education. Nurses with master's degrees in nursing account for less than one percent of the nurses employed in industry and offices, and non-nursing master's prepared nurses less than one percent of those in offices.

The majority of nurses with their highest degree being other than a doctorate are employed in hospitals with a range of 84.8% to 54.3%. associate

degree nurses are most likely to be employed in hospitals, 84.8%, followed by those with nursing baccalaureate degrees, 81.1%, diploma nurses, 71.8%, non-nursing baccalaureate nurses, 71.0%, non-nursing master's prepared nurses, 58.7%, and nursing master's prepared, 54.3%. While 62.8% of those nurses whose highest degree is a doctorate are employed in nursing education, 35.9% of those with a highest degree of a nursing master's degree are employed in nursing education.

Tables 10-19 demonstrate the relationship between field of employment and highest degree held, for each of the Health Service Areas.

TABLE 10. RELATIONSHIP BETWEEN FIELD OF EMPLOYMENT AND HIGHEST DEGREE HELD BY

| | ILLINOI | S REGISTE | ERED NURSE | IN HSA 1 | | | | |
|----------|---------|-----------|------------|----------|-----------|-------|-------|------|
| FIELD | SAMPLE | | | HIGHE | ST DEGREE | HELD | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| EMPLOY | | | | BACC | BACC | MAST | MAST | EDD |
| HOSPITAL | 1517 | 57.9% | 25.1% | 12.0% | 2.7% | 1.6% | 0.6% | 0.1% |
| NURSING | | | | | | | | |
| HOME | 309 | 71.2% | 17.5% | 6.8% | 3.6% | 0.3% | 0.6% | 0.0% |
| NURSING | | | | | | | | |
| EDUCATIO | N 108 | 3.7% | 1.9% | 17.6% | 4.6% | 54.6% | 8.3% | 9.3% |
| PRIVATE | | | | | | | | |
| DUTY | 44 | 52.3% | 22.7% | 11.4% | 4.5% | 4.5% | 4.5% | 0.0% |
| PUBLIC | | | | | | | | 0.00 |
| HEALTH | 89 | 49.4% | 13.5% | 24.7% | 5.6% | 6.7% | 0.0% | 0.0% |
| SCHOOL | | | | | | | | 0.00 |
| HEALTH | 102 | 25.5% | 4.9% | 22.5% | 34.3% | 2.9% | 9.8% | 0.0% |
| INDUSTRY | 72 | 90.3% | 8.3% | 1.4% | 0.0% | 0.0% | 0.0% | 0.0% |
| OFFICE | 304 | 76.0% | 12.2% | 8.6% | 2.6% | 0.3% | 0.3% | 0.0% |
| TOTAL | 2545 | 1491 | 507 | 299 | 107 | 97 | 33 | 11 |

Chi-square=1546.1, df=42, p<.01

There is a significant relationship between the field of employment and the highest degree held by the nurses in Health Service Area 1. While more than half of the nurses employed in hospitals, nursing homes, private duty, industry and offices have no degree, over half of those employed in nursing education have as their highest degree a master's degree in nursing. Together the nursing baccalaureate and non nursing baccalaureate prepared nurses account for greater than one-half of the nurses employed in school health with those

whose degree is in nursing having a slightly higher percentage. There are basically no nurses with a non-nursing baccalaureate degree or an advanced degree employed in industry, and less than one-percent of those with an advanced degree in office nursing.

Comparing these figures with those in Table 9 for Illinois, one finds that the percentages of nurses with no degree employed in hospitals and industry are higher than those for Illinois as a whole. Nurses with baccalaureate degrees in nursing in HSA 1 constitute about half the percentage of nurse employed in hospitals and nursing homes as the comparable educational groups for the State. Similarly, there is a lower percentage of nurses with non-nursing baccalaureate degrees employed in hospitals and public health in HSA 1 as compared to Illinois while there is an increased percentage of this group employed in nursing education and school health. Nurses whose highest degree is a non-nursing master's constitute a larger percentage of the nurses employed in private duty and a smaller percentage of nurses employed in hospitals, nursing homes, public health and industry in HSA 1 when compared to the pattern in Illinois.

Associate degree, nursing baccalaureate and diploma nurses are most likely to be employed in hospitals in HSA 1, 75.1%, 60.9%, and 58.9% respectively. More than half of the nurses with master's degrees in nursing, 60.8%, or doctorates, 90.9% are employed in nursing education. The nurses in HSA 1 with non-nursing master's degrees are employed fairly evenly in hospitals, nursing education and school health, 27.3%, 27.3% and 30.3% respectively. These figures for HSA 1 vary from those for all of Illinois in several fields of employment. Overall, there is a lower percentage of nurses at all levels of education employed in hospitals. Nurses in HSA 1 with no degree, and associate degree or baccalaureate degree are more frequently employed in nursing homes and doctor's offices than are nurses from the same educational groups for Illinois at large.

TABLE 11. RELATIONSHIP BETWEEN FIELD OF EMPLOYMENT AND HIGHEST DEGREE HELD BY

| | ILLINOI | S REGISTE | ERED NURSES | S IN HSA | 2 | | | | | |
|-----------|---------|---------------------------------------|---------------------|----------|-------|-------|-------|------|--|--|
| FIELD | SAMPLE | · · · · · · · · · · · · · · · · · · · | HIGHEST DEGREE HELD | | | | | | | |
| OF | SIZE | NONE | ADN | NURSE | OTHE | NURSE | OTHER | PHD/ | | |
| EMPLOY | | | | BACC | BACC | MAST | MAST | EDD | | |
| HOSPITAL | 2374 | 58.5% | 24.5% | 11.2% | 4.4% | 0.9% | 0.5% | 0.0% | | |
| NURSING | | | | | | | | | | |
| HOME | 300 | 72.0% | 17.0% | 4.7% | 5.0% | 0.3% | 1.0% | 0.0% | | |
| NURSING | | | | | | | | | | |
| EDUCATION | 115 | 1.7% | 0.0% | 24.3% | 1.7% | 48.7% | 19.1% | 4.3% | | |
| PRIVATE | | | | | | | | | | |
| DUTY | 33 | 75.8% | 18.2% | 6.1% | 0.0% | 0.0% | 0.0% | 0.0% | | |
| PUBLIC | | | | | | | | | | |
| HEALTH | 104 | 58.7% | 10.6% | 19.2% | 3.8% | 6.7% | 1.0% | 0.0% | | |
| SCHOOL | | | | | | | | | | |
| HEALTH | 49 | 55.1% | 8.2% | 20.4% | 12.2% | 0.0% | 4.1% | 0.0% | | |
| INDUSTRY | 60 | 83.3% | 8.3% | 6.7% | 1.7% | 0.0% | 0.0% | 0.0% | | |
| OFFICE | 319 | 76.8% | 13.8% | 6.3% | 1.9% | 0.9% | 0.3% | 0.0% | | |
| TOTAL | 3354 | 2014 | 702 | 364 | 139 | 88 | 42 | 5 | | |

Chi-square=1650.8, df=42, p<.01

There is a significant relationship between field of employment and highest degree held for nurses in HSA 2. More than half of the nurses in HSA 2 employed in hospitals hold no degree while those with nursing baccalaureate and master's degrees constitute approximately 75% of the nurses employed in nursing education, a field in which there are no associate degree nurses employed. There are no non-nursing baccalaureate or advanced degree nurses employed in the field of private duty nursing. Likewise, there are no advanced degree prepared nurses employed in industrial nursing. Doctorally prepared nurses are employed solely in nursing education in HSA 2.

There is an increased employment of nurses with no degree in hospitals, public health and school health nursing in HSA 2 when compared with the pattern for Illinois as a whole. Associate degree nurses are also more frequently employed in school health in HSA 2 than in Illinois overall. The employment of nurses whose highest degree is a nursing baccalaureate in hospitals, private duty, public health or offices is lower for HSA 2 than the State as the employment of nurses with non-nursing baccalaureates in public and school

health, industrial, and office nursing. Nurses with master's degrees in nursing account for a smaller percentage of those nurses in HSA 2 employed in the fields of hospital and school health nursing. Similarly, nurses with non-nursing master's degrees account for a smaller percentage of the public and school nurses in HSA 2. Nurses with a non-nursing master's degree do account for a larger percentage of the nurses in HSA 2 employed in nursing education than is found in Illinois at large.

More than half of the associate degree, baccalaureate and diploma nurses in HSA 2 are employed in the field of hospital nursing. The figures for this are associate degree, 82.8%, non-nursing, 75.5%, nursing baccalaureate, 73.1%, and diploma 68.9%. Both nursing and non-nursing master's prepared nurses in HSA 2 are most likely to be employed in nursing education, 63.6% and 52.4% respectively. While there is less variance from the State for employment of nurses in HSA 2 than in HSA 1, several variations are noticeable. Nurses in HSA 2 with nursing master's degrees are less likely to be employed in hospitals than nurses in Illinois overall. The nurses with advanced degrees in HSA 2 are considerably more likely to be employed in nursing education than the corresponding groups for the State.

TABLE 12. RELATIONSHIP BETWEEN FIELD OF EMPLOYMENT AND HIGHEST DEGREE HELD BY

____ILLINOIS REGISTERED nurses IN HSA 3

| FIELD | SAMPLE | HIGHEST DEGREE HELD | | | | | | | |
|-----------|--------|---------------------|-------|-------|-------|-------|-------|------|--|
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ | |
| EMPLOY | | | | BACC | BACC | MAST | MAST | EDD | |
| HOSPITAL | 1832 | 59.9% | 20.4% | 11.4% | 6.3% | 1.1% | 1.0% | 0.0% | |
| NURSING | | | | | | | | | |
| HOME | 194 | 78.9% | 9.3% | 7.2% | 3.1% | 0.0% | 1.5% | 0.0% | |
| NURSING | | | | | | | | | |
| EDUCATION | 75 | 8.0% | 0.0% | 48.0% | 4.0% | 25.3% | 10.7% | 4.0% | |
| PRIVATE | | | | | | | | | |
| DUTY | 18 | 77.8% | 11.1% | 5.6% | 5.6% | 0.0% | 0.0% | 0.0% | |
| PUBLIC | | | | | | | | | |
| HEALTH | 137 | 62.0% | 8.0% | 16.4% | 11.7% | 1.5% | 3.6% | 0.7% | |
| SCHOOL | | | | | | | | | |
| HEALTH | 55 | 50.9% | 3.6% | 18.2% | 20.0% | 1.8% | 5.5% | 0.0% | |
| INDUSTRY | 16 | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | |
| OFFICE | 280 | 71.8% | 14.3% | 9.3% | 3.9% | 0.4% | 0.4% | 0.0% | |
| TOTAL | 2607 | 1600 | 447 | 312 | 163 | 43 | 38 | 4 | |

Chi-square=629.8, df=42, p<.01

There is a significant relationship between the field of employment of nurses in HSA 3 and the highest degree held. Nurses with no degree accounted for more than half of those employed in hospitals, nursing homes, private duty, industry and offices. In addition nurses with no degree accounted for a majority of the nurses employed in public health and school nursing. Nurses with a baccalaureate degree in nursing accounted for slightly less than half of those employed in nursing education while nurses with a master's degree in nursing constituted another one-fourth of the nursing educators. Nurses with an associate degree as their highest degree accounted for none of the nurses employed in nursing education or industry in HSA 3. All of the industrial nurses are diploma educated. Nurses with advanced degrees do not account for any of the private duty nurses nor do those with a master's degree in nursing as their highest degree account for any of the nurses in nursing homes in HSA 3.

When compared to the Illinois pattern of employment of nurses based on the highest degree held, there are several notable variations in the pattern for HSA 3. There is an increase in the percentage of the nurses constituting those employed in all fields except office nursing. In contrast, nurses with a baccalaureate degree in nursing account for a smaller percentage of those nurses employed in all fields of nursing in HSA 3 than in Illinois. Nursos with a non-nursing master's degree account for a smaller percentage of the nurses employed in nursing education, private duty, public health, school health and industry in HSA 3.

The majority of nurses with no degree, an associate degree or a nursing or non-nursing baccalaureate degree are most frequently employed in hospital nursing in HSA 3, 68.6%, 83.7%, 66.7% and 70.6% respectively. education is the field of employment for 44.2.% of the nurses in HSA 3 with a nursing master's degree and 21.1% of those with a non-nursing master's degree as their highest degrees. Regardless of this, 46.5% and 47.4% respectively of these two groups are employed in hospitals. This data illustrates nurses in HSA 3 with a nursing baccalaureate degree are less likely to be employed in hospitals that the nursing population in Illinois. The percentage of nurses with nursing baccalaureate degrees who are employed in office nursing is higher than the statewide pattern as Table 9 demonstrated. Nurses with no degree, a non-nursing baccalaureate, or a non-nursing master's degree in HSA 3 were more likely to be employed in public health than the comparable groups in the state as a whole. HSA 3 also had a higher percentage of nurses with non-nursing master's degrees employed in nursing education than did the State.

TABLE 13. RELATIONSHIP BETWEEN FIELD OF EMPLOYMENT AND HIGHEST DEGREE HELD BY

| | ILLINOI | S REGISTE | RED NURSES | IN HSA 4 | | | | |
|----------|---------|-----------|------------|----------|--------|---------|--|------|
| FIELD | SAMPLE | | | HIGHEST | DEGREE | HELD | 200 and 10 a | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE , | OTHER | PHD/ |
| EMPLOY | | | | BACC | BACC | MAST | MAST | EDD |
| HOSPITAL | 2137 | 56.7% | 19.9% | 14.4% | 6.0% | 1.4% | 1.5% | 0.2% |
| NURSING | | | | | | | | |
| HOME | 330 | 68.8% | 17.0% | 7.3% | 3.3% | 1.2% | 2.1% | 0.3% |
| NURSING | | | | | | | | |
| EDUCATIO | 94 | 5.3% | 0.0% | 31.9% | 5.3% | 44.7% | 6.4% | 6.4% |
| PRIVATE | | | | | | | | |
| DUTY | 19 | 63.2% | 21.1% | 15.8% | 0.0% | 0.0% | 0.0% | 0.0% |
| PUBLIC | | | | | | | | |
| HEALTH | 114 | 55.3% | 7.0% | 21.9% | 8.8% | 4.4% | 2.6% | 0.0% |
| SCHOOL | | | | | | | | |
| HEALTH | 68 | 47.1% | 0.0% | 20.6% | 23.5% | 0.0% | 8.8% | 0.0% |
| INDUSTRY | 67 | 77.6% | 0.0% | 17.9% | 4.5% | 0.0% | 0.0% | 0.0% |
| OFFICE | 300 | 73.0% | 14.0% | 6.7% | 5.3% | 0.3% | 0.7% | 0.0% |
| TOTAL | 3129 | 1822 | 535 | 436 | 189 | 81 | 55 | 11 |

Chi-square=1027.7, df=42, p<.01

There is a significant relationship between the field of employment and highest degree held by the nurses in HSA 4. Nurses with no degree account for over half of the nurses employed in hospital, nursing home, private duty, public health, industrial and office nursing and nearly half of those employed in school health nursing. In nursing education the most frequently employed nurses hold a master's degree with a major in nursing followed by those with a nursing baccalaureate degree. Nurses with a non-nursing baccalaureate degree or an advanced degree constitute none of the nurses employed in private duty. Likewise, nurses with advanced degrees are not employed in industry although nurses with non-nursing master's degrees do account for 8.8% of the school nurses in HSA 4. Associate degree nurses account for none of the school health or industrial nurses.

When the data for HSA 4 is compared with that for Illinois, it is noted that diploma nurses account for an increased percentage of the nurses employed in hospital, public health and school health nursing. The pattern of

utilization of nurses with a baccalaureate degree in nursing in HSA 4 varies from that of Illinois in several areas. Nursing baccalaureate nurses account for a smaller percentage of nurses in HSA 4 employed in hospitals, nursing homes and public health than in Illinois at large. In contrast, this same group accounts for a larger percentage than the Illinois figures for nurses employed in nursing education, private duty, industry and offices. There is a somewhat larger percentage of the nurses employed in nursing education who have a non-nursing baccalaureate as their highest degree while there is a lower percentage of non-nursing master's prepared nurses in the same field of employment in HSA 4 as compared to Illinois.

Hospital nursing is the field of employment for more than half of the nurses in HSA 4 with no degree, an associate degree, a nursing or non-nursing baccalaureate degree or a non-nursing master's degree, 66.5%, 79.4%, 70.6%, 67.7% and 56.4% respectively. Of the nurses with nursing master's degree, 51.9% are employed in nursing education. This employment for nurses in HSA 4 varies from the statewide pattern in the percentage of nurses with associate degrees employed in nursing homes being almost twice the Illinois percentage. There is also a decrease in the percentage of nurses in HSA 4 with a nursing master's degree who are employed in hospitals and an increased percentage employed in nursing education when compared with the Illinois picture as a whole.

TABLE 14. RELATIONSHIP BETWEEN FIELD OF EMPLOYMENT AND HIGHEST DEGREE HELD BY

LLINOIS REGISTERED NURSES IN HSA 5

| | TUUTINO | TO VEGIOTE | RED NORSES | IN HSA 5 | | | | |
|-------------|---------|------------|------------|----------|--------|-------|-------|------|
| FIELD | SAMPLE | ****** | | HIGHEST | DEGREE | HELD | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| EMPLOY | | | | BACC | BACC | MAST | MAST | EDD |
| HOSPITAL | 1285 | 38.1% | 43.5% | 11.3% | 5.7% | 1.1% | 0.3% | 0.0% |
| NURSING | | | | | | | | |
| HOME | 194 | 48.5% | 37.1% | 6.7% | 6.2% | 0.5% | 1.0% | 0.0% |
| NURSING | | | | | | | | |
| EDUCATIO | ON 67 | 3.0% | 4.5% | 43.3% | 4.5% | 34.3% | 7.5% | 3.0% |
| PRIVATE | | | | | | | | |
| DUTY | 12 | 25.0% | 58.3% | 8.3% | 0.0% | 0.0% | 8.3% | 0.0% |
| PUBLIC | | 3 | | | | | | |
| HEALTH | 83 | 41.0% | 20.5% | 20.5% | 16.9% | 1.2% | 0.0% | 0.0% |
| SCHOOL | | | | | | | | |
| HEALTH | 72 | 26.4% | 11.1% | 26.4% | 27.8% | 2.8% | 4.2% | 1.4% |
| INDUSTRY | 22 | 45.5% | 40.9% | 4.5% | 9.1% | 0.0% | 0.0% | 0.0% |
| OFFICE | 167 | 66.5% | 19.2% | 10.8% | 2.4% | 1.2% | 0.0% | 0.0% |
| TOTAL | 1902 | 7.63 | 707 | 243 | 128 | 43 | 1 | 3_ |

Chi-square=694.5, df=42, p<.01

There is a significant relationship between the field of employment and the highest degree held by nurses in HSA 5 with diploma nurses accounting for the majority of nurses employed in offices and associate degree nurses the majority of the private duty nurses. Nurses with nursing baccalaureates and master's degrees account for slightly more than three-fourths of the nurses in HSA 5 employed in nursing education. Those nurses who have no degree or an associate degree account for over 80% of the nurses in HSA 5 who are employed in industrial nursing, a field with no advanced degree nurses. None of the private duty nurses have, as their highest degree, a non-nursing baccalaureate or a nursing master's degree.

The majority of nurses in HSA 5 with no degree, an associate degree, a nursing baccalaureate degree or a non-nursing baccalaureate are employed in hospitals, 64.2%, 79.1%, 59.7% and 57.0% respectively while the majority of nurses in HSA 5 whose highest degree is a nursing master's, 53.5%, or a doctorate, 66.7% are employed in nursing education. Nurses with non-nursing baccalaureate and master's degrees and those with doctorates are most

frequently employed in school nursing, 15.6%, 20.0% and 33.3%. When compared with Illinois as a whole, nurses in HSA 5 indicated a lower frequency of employment in hospital settings for nurses with baccalaureate and higher degrees, nursing or non-nursing. A higher percentage of nurses with master's degree, nursing or non-nursing, identify nursing education as their field of employment than do the comparable groups in the State at large. Also of interest is the higher percentage of nurses with nursing baccalaureate degrees who are employed in school health, 7.8%, and office nursing, 7.4%, than is found in the statewide pattern of employment. Nurses in HSA 5 with non-nursing baccalaureate degrees are also more likely to be employed in school health than is found in the state overall. The differences in these patterns is from two or four times the percentages higher than the statewide picture demonstrated.

TABLE 15. RELATIONSHIP BETWEEN FIELD OF EMPLOYMENT AND HIGHEST DEGREE HELD BY

| | | ILLINOIS F | REGISTERED | NURSES IN | N HSA 6/7 | | | | |
|----------|--------|---------------------|------------|-----------|-----------|-------|-------|-------|--|
| FIELD | SAMPLE | HIGHEST DEGREE HELD | | | | | | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ | |
| EMPLOY | | | | BACC | BACC | MAST | MAST | EDD | |
| HOSPITAL | 21313 | 37.9% | 17.3% | 31.9% | 7.0% | 4.1% | 1.6% | 0.2% | |
| NURSING | | | | | | | | | |
| HOME | 1362 | 59.9% | 11.6% | 20.0% | 6.1% | 1.2% | 1.1% | 0.1% | |
| NURSING | | | | | | | | | |
| EDUCATIO | N 612 | 1.6% | 0.0% | 14.5% | 1.6% | 64.9% | 6.5% | 10.6% | |
| PRIVATE | | | | | | | | | |
| DUTY | 365 | 59.5% | 20.3% | 12.6% | 5.2% | 1.4% | 0.5% | 0.5% | |
| PUBLIC | | | | | | | | | |
| HEALTH | 817 | 25.1% | 9.2% | 39.4% | 12.5% | 7.5% | 5.9% | 0.0% | |
| SCHOOL | | | | | | | | | |
| HEALTH | 571 | 25.9% | 3.2% | 28.9% | 22.2% | 4.9% | 14.9% | 0.0% | |
| INDUSTRY | 384 | 64.1% | 8.3% | 10.4% | 14.1% | 1.8% | 1.3% | 0.0% | |
| OFFICE | 1296 | 64.8% | 12.3% | 16.4% | 4.9% | 0.9% | 0.6% | 0.1% | |
| TOTAL | 26720 | 10558 | 4202 | 7956 | 1943 | 1398 | 550 | 113 | |

Chi-square=8083.6, df=42, p<.01

There is a significant relationship between the field of employment and the highest degree held by nurses in HSA 6/7, Cook and DuPage Counties. While nurses with no degree account for the majority of nurses employed in hospital, private duty, industrial and office nursing, the majority of nurses employed in

the field of nursing education hold a nursing master's degree as their highest degree.

When compared with Illinois as a whole, the employment pattern for nurses relative to highest degree held varies primarily in those nurses with no degree and those with a nursing baccalaureate. Nurses with no degree account for a decreased percentage of those employed in the fields of nursing education, public health and school health. Those with nursing baccalaureate degrees account for an increased percentage of nurses in HSA 6/7 employed in hospitals and nursing homes and a decreased percentage of those employed in nursing education. Another contrast from the statewide pattern is found in nurses whose highest degree is a nursing master's degree with an increase in the percentage comprising the nurses in the fields of nursing education and industry.

Nurses in HSA 6/7 are most likely to be employed in hospitals with more than half of all categories except those with doctorates being employed in hospital settings. Less than one percent of the nurses with no degree, associate degrees, or non-nursing baccalaureate degrees were employed in nursing education. Likewise one percent or less of the nurses with nursing or non-nursing baccalaureate or masters degrees were employed in private duty. Other areas of less than one percent included nurses with associate degrees employed in school health or industrial nursing, nurses with nursing baccalaureate degrees or advanced degrees in industrial nursing, and doctorally prepared nurses employed in fields other than hospitals, nursing education or private duty.

TABLE 16. RELATIONSHIP BETWEEN FIELD OF EMPLOYMENT AND HIGHEST DEGREE HELD BY

| | ILLINO | S REGISTE | RED NURSES | HSA 8 | | | | |
|----------|--------|-----------|------------|--------|----------|-------|-------|------|
| FIELD | SAMPLE | | | HIGHES | T DEGREE | HELD | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| EMPLOY | | | · | BACC | BACC | MAST | MAST | EDD |
| HOSPITAL | 2894 | 44.2% | 27.3% | 17.6% | 7.5% | 1.6% | 1.8% | 0.0% |
| NURSING | | | | | | | | |
| HOME | 350 | 58.3% | 18.6% | 13.4% | 6.6% | 2.0% | 1.1% | 0.0% |
| NURSING | | | | | | | | |
| EDUCATIO | N 60 | 0.0% | 0.0% | 11.7% | 3.3% | 70.0% | 10.0% | 5.0% |
| PRIVATE | | | | | | | | |
| DUTY | 132 | 62.9% | 17.4% | 11.4% | 8.3% | 0.0% | 0.0% | 0.0% |
| PUBLIC | | | | | | • | | |
| HEALTH | 87 | 25.3% | 11.5% | 39.1% | 11.5% | 6.9% | 5.7% | 0.0% |
| SCHOOL | | | | | | | | |
| HEALTH | 151 | 26.5% | 4.6% | 26.5% | 32.5% | 2.0% | 7.9% | 0.0% |
| INDUSTRY | 80 | 58.8% | 10.0% | 8.8% | 18.8% | 1.3% | 2.5% | 0.0% |
| OFFICE | 315 | 68.3% | 12.4% | 12.7% | 5.7% | 0.3% | 0.6% | 0.0% |
| TOTAL | 4069 | 1890 | 942 | 700 | 345 | 106 | 82 | 4 |

Chi-square=1646.6, df=42, p<.01

There is a significant relationship between the field of employment and highest degree held by nurses in HSA 8. While nurses with no degree account for more than half of the nurses employed in nursing homes, private duty, industry and offices in HSA 8, 70% of the nursing educators hold a master's degree with a major in nursing. Nurses with a baccalaureate degree in nursing and those with no degree account for the majority of the public health nurses. School nurses are somewhat evenly divided between nurses with nursing baccalaureate degrees, non-nursing baccalaureate degrees and no degrees.

Variations from the statewide pattern of employment by highest degree held by nurses include a decreased percentage of the public health and industrial nurses with no degree and an increased percentage of the nurses employed in hospitals and nursing education holding a nursing baccalaureate. Nurses in HSA 8 with non-nursing baccalaureates account for a larger portion of the nurses employed in the fields of industrial and school nursing. There is also an increased portion of the nurses employed in nursing homes and nursing education who hold nursing master's degrees and a decreased percentage of the

same group comprising the nurses employed in hospitals.

In HSA 8, nurses with no degree, an associate degree, a nursing or non-nursing baccalaureate degree or a non-nursing master's degree are most likely to be employed in hospitals, 67.7%, 83.9%, 72.9%, 62.9% and 62.2% respectively. While not a majority, 39.6% of those nurses with a nursing master's degree are employed in nursing education in HSA 8. When compared with the Illinois pattern, the employment pattern of nurses in HSA 8, with respect to highest degree held, varies primarily in three areas. The percentage of nurses holding a master's degree in nursing and employed in nursing homes, 6.6%, is nearly four times greater than the comparable group in Illinois. Nurses with non-nursing master's degrees, 7.8%, are less likely to be employed in nursing education, and nurses with non-nursing baccalaureate degrees, 14.2%, are more likely to be employed in school health than the comparable groups in Illinois as a whole.

TABLE 17. RELATIONSHIP BETWEEN FIELD OF EMPLOYMENT AND HIGHEST DEGREE HELD BY

| | ILLINO | IS REGISTE | RED NURSES | IN HSA | 9 | | | |
|----------|--------|------------|------------|--------|-----------|--------|-------|------|
| FIELD | SAMPLE | | | HIGH | EST DEGRE | E HELD | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| EMPLOY | | | | BACC | BACC | MAST | MAST | EDD |
| HOSPITAL | 1079 | 50.6% | 26.5% | 14.8% | 5.9% | 1.3% | 0.5% | 0.4% |
| NURSING | | | | | | | | |
| HOME | 147 | 56.5% | 17.7% | 10.2% | 12.2% | 0.7% | 2.7% | 0.0% |
| NURSING | | | | | • | | | |
| EDUCATIO | N 71 | 2.8% | 0.0% | 19.7% | 2.8% | 66.2% | 5.6% | 2.8% |
| PRIVATE | | | | | | | | |
| DUTY | 22 | 54.5% | 31.8% | 13.6% | 0.0% | 0.0% | 0.0% | 0.0% |
| PUBLIC | | | | | | _ | | |
| HEALTH | 64 | 35.9% | 12.5% | 29.7% | 15.6% | 3.1% | 3.1% | 0.0% |
| SCHOOL | | | | | | | | |
| HEALTH | 45 | 31.1% | 4.4% | 26.7% | 33.3% | 0.0% | 0.0% | 4.4% |
| INDUSTRY | 43 | 76.7% | 7.0% | 9.3% | 7.0% | 0.0% | 0.0% | 0.0% |
| OFFICE | 117 | 76.1% | 13.7% | 5.1% | 4.3% | 0.0% | 0.0% | 0.9% |
| TOTAL | 1588 | 802 | 348 | 233 | 117 | 6.4 | 15 | 9 |

Chi-square=955.1, df=42, p<.01

There is a significant relationship between the field of employment and highest degree held by nurses in HSA 9. While nurses with no degree account

for the majority of nurses employed in hospitals, nursing homes, private duty, industry, and offices, the majority of nursing educators hold, as their highest degree, a master's degree in nursing. School nurses are comprised of nurses with the highest degree of a baccalaureate degree, nursing and non-nursing. Nurses with non-nursing baccalaureate degrees or advanced degrees account for none of the nurses employed in private duty nursing.

This pattern of employment, when compared with Table 9 for Illinois as a whole, reveals several variations. The percentage of the nurses with no degree employed in nursing homes is lower than statewide as is the proportion of nurses with nursing baccalaureate degrees employed in hospitals and offices. There is an increased proportion of associate degree nurses comprising the nurses employed in private duty. Nurses with non-nursing baccalaureate degrees account for a increased proportion of nurses employed in hospitals, public health and school health nursing. The percentage of nurses with master's degrees in nursing comprising the nurses in HSA 9 employed in hospitals is lower than that for Illinois as a whole while this same group comprises a larger percentage of the nursing educators in HSA 9 than Illinois. Nurses with non-nursing master's degrees account for a larger proportion of the nursing home nurses and a smaller proportion of the nursing educators than is found in the State.

While the majority of nurses with no degree, 68.1%, associate degrees, 82.8%, nursing baccalaureate degrees, 68.7%, and non-nursing baccalaureate degrees, 54.7%, are employed in hospitals, the majority of nurses with master's degrees in nursing, 73.4%, are employed in nursing education. When the pattern of distribution of nurses in HSA 9 across the employment fields according to highest degree held is compared with the State pattern, several distinctions appear. There is a decreased percentage of nurses employed in hospitals with nursing or non-nursing baccalaureate degrees and nursing or non-nursing master's degrees. In the latter cases, approximately one-half the statewide percentage. More than twice as many of the non-nursing baccalaureate prepared nurses are employed in nursing homes in HSA 9 as in the State as a whole, 15.4% Five times the percentage of nurses with non-nursing master's degrees, 26.7%, are employed in nursing homes in HSA 9 as in the total Illinois None of the nurses in HSA 9 who hold a master's degree are employed in school nursing while almost twice the percentage of nurses with non-nursing master's degrees are employed in public health, 13.3%.

TABLE 18. RELATIONSHIP BETWEEN FIELD OF EMPLOYMENT AND HIGHEST DEGREE HELD BY

| | ILLINO | IS REGISTE | RED NURSES | IN HSA | 10 | | | | | | |
|-----------|--------|------------|---------------------|--------|-------|-------|-------|------|--|--|--|
| FIELD | SAMPLE | | HIGHEST DEGREE HELD | | | | | | | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ | | | |
| EMPLOY | | | | BACC | BACC | MAST | MAST | EDD | | | |
| HOSPITAL | 802 | 65.0% | 20.2% | 10.6% | 2.5% | 1.4% | 0.4% | 0.0% | | | |
| NURSING | | | | | | | | | | | |
| HOME | 69 | 81.2% | 14.5% | 4.3% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| NURSING | | | | | | | | | | | |
| EDUCATION | 1 48 | 2.1% | 0.0% | 33.3% | 4.2% | 50.0% | 8.2% | 2.1% | | | |
| PRIVATE | | | | | | | | | | | |
| DUTY | 27 | 63.0% | 25.9% | 11.1% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| PUBLIC | | | | | | | | | | | |
| HEALTH | 44 | 50.0% | 11.4% | 27.3% | 4.5% | 2.3% | 4.5% | 0.0% | | | |
| SCHOOL | | | | | | | | | | | |
| HEALTH | 39 | 61.5% | 5.1% | 25.6% | 5.1% | 0.0% | 2.6% | 0.0% | | | |
| INDUSTRY | 30 | 76.7% | 13.3% | 6.7% | 0.0% | 0.0% | 3.3% | 0.0% | | | |
| OFFICE | 99 | 81.8% | 7.1% | 10.1% | 0.0% | 1.0% | 0.0% | 0.0% | | | |
| TOTAL | 1158 | 745 | 197 | 141 | 26 | 37 | 1 | 1 | | | |

Chi-square=518.4, df=42, p<.01

There is a significant relationship between field of employment and highest degree held by nurses in HSA 10. Nurses with no degree account for at least half of the nurses employed in all fields of nursing except nursing education. One-half of the nurses employed in nursing education hold, as their highest degree, a master's degree with a major in nursing. Another third of the nurses employed by nursing education programs in HSA 10 hold a nursing baccalaureate degree as their highest degree. Nurses with baccalaureate degrees in nursing account for approximately one-fourth of the nurses employed in public health and in school nursing.

In comparing the data for HSA 10 with that for Illinois, the primary changes appear in the employment of nurses with no degree. This group accounts for a greater percentage of those nurses employed in hospitals, nursing homes, public health, school nursing and offices. The greatest variation being in school nursing where the proportion of nurses with no degrees accounts for approximately twice that for Illinois at large. Variations from the State pattern also appear in the employment of associate degree nurses in private

duty and industry where they account for an increased percentage and office nursing where they comprise a smaller proportion of the nurses in HSA 10 than in Illinois overall. Nurses with a baccalaureate degree in nursing comprise a smaller proportion of the hospital nurses in HSA 10 while comprising a larger proportion of the nurses employed in nursing homes and nursing education. Nurses with non-nursing baccalaureate degrees account for a lower percentage of those employed in the fields of public and school health, the latter being somewhat more than four times less than found in Illinois as a whole. Similarly nurses with non-nursing master's degrees comprise a smaller proportion of the nurses in HSA 10 employed in the field of school health by four times the figure for Illinois.

While the majority of nurses with no degree, 69.9%, or an associate degree, 82.2%, or baccalaureate degree, 60.3% with the degree in nursing and 76.9% in non-nursing, tend to be employed in hospital settings, those with advanced degrees are more likely to be employed in nursing education, 64.9% of those with master's degrees in nursing, 36.4% of those with non-nursing master's degrees and 100% of the doctorally prepared nurses. None of those with doctorates or master's degrees in nursing were employed in private duty, school health or industrial nursing. When this relationship between field of employment and highest degree held by nurses in HSA 10 is compared to Illinois, several variations appear. A decreased percentage of nurses with nursing baccalaureate degrees are employed in hospitals with the same true for nurses with master's degrees, nursing or non-nursing. In HSA 10 there are higher percentages of nurses with nursing baccalaureate degrees and master's degrees in nursing or another field employed in nursing education than was found in the State as a whole. Nurses with non-nursing master's degrees were also more likely to be employed in public and industrial health in HSA 10 than in Illinois at large. Diploma nurses indicated an increased tendency for employment in offices in HSA 10 than was found in the statewide pattern.

TABLE 19. RELATIONSHIP BETWEEN FIELD OF EMPLOYMENT AND HIGHEST DEGREE HELD BY

| | ILLING | IS REGISTE | RED NURSES | IN HSA 1 | 1 | | | | | | |
|----------|--------|------------|---------------------|----------|-------|-------|-------|-------|--|--|--|
| FIELD | SAMPLE | | HIGHEST DEGREE HELD | | | | | | | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ | | | |
| EMPLOY | | | | BACC | BACC | MAST | MAST | EDD | | | |
| HOSPITAL | 1500 | 44.5% | 31.9% | 16.6% | 4.5% | 0.8% | 1.7% | 0.0% | | | |
| NURSING | | | | | | | | | | | |
| HOME | 153 | 68.6% | 19.6% | 4.6% | 5.2% | 0.0% | 2.0% | 0.0% | | | |
| NURSING | | | | | | | | | | | |
| EDUCATI | ON 63 | 4.8% | 1.6% | 19.0% | 9.5% | 49.2% | 4.8% | 11.1% | | | |
| PRIVATE | | | | | | | | | | | |
| DUTY | 8 | 25.0% | 37.5% | 0.0% | 25.0% | 0.0% | 12.5% | 0.0% | | | |
| PUBLIC | | | | | | | | | | | |
| HEALTH | 70 | 31.4% | 20.0% | 35.7% | 7.1% | 0.0% | 5.7% | 0.0% | | | |
| SCHOOL | | | | | | | | | | | |
| HEALTH | 60 | 20.0% | 10.0% | 28.3% | 33.3% | 3.3% | 5.0% | 0.0% | | | |
| INDUSTRY | 25 | 80.0% | 8.0% | 12.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| OFFICE | 106 | 68.9% | 20.8% | 7.5% | 1.9% | 0.9% | 0.0% | 0.0% | | | |
| TOTAL | 1985 | 905 | 557 | 321 | 110 | 46 | 39 | 7 | | | |

Chi-square=1106.2, df=42, p<.01

There is a significant relationship between the field of employment and the highest degree held by nurses in HSA 11 with nurses holding no degree accounting for over half of the nurses in nursing homes, industry and nursing homes while slightly less than half of the nurses employed in nursing education hold a nursing master's degree as their highest degree. Approximately two-thirds of the public health nurses in HSA 11 have no degree or a nursing baccalaureate degree. The field of school health nursing is primarily comprised of nurses with baccalaureate degrees, nursing and non-nursing, and nurses with no degree.

Variations from the State pattern for field of employment as related to highest degree held can be seen in the decreased percentage of diploma nurses employed in private duty and school health and the increased percentage of this group employed in the field of industrial nursing. Associate degree nurses account for a larger percentage of the nurses employed in hospitals, private duty, public health and school health in HSA 11 than in Illinois overall. There is a smaller percentage of nurses with the highest degree of a nursing

baccalaureate comprising the nursing home nurses in HSA 11. Non-nursing baccalaureate nurses account for a smaller proportion of the nurses in HSA 11 employed in public health and a larger proportion of those employed in nursing education, private duty and school health. The percentage of nurses with nursing master's degrees comprising the nurses employed in hospitals in lower for HSA 11 than Illinois as in the proportion of non-nursing master's degree prepared nurses employed in nursing education and school health.

The majority of all categories of nurses except those with nursing master's degrees and doctoral degrees are employed in hospitals, 73.8% of those with a diploma, 86.0% with an associate degree, 77.6% with a nursing baccalaureate, 60.9% with a non-nursing baccalaureate and 64.1% with a non-nurisng masters. The majority of nurses with nursing master's degrees, 67.4%, and doctoral degrees, 100%, are employed in nursing education. negligible percentage of nurses in HSA 11 are employed in private duty regardless of highest degree held. Five primary variations from the pattern of employment pattern in Illinois as a whole appear when this data for HSA 11 is compared with the total State data. A decrease of almost half appears in the percentage of nurses with master's degrees in nursing employed in hospitals with a corresponding increase in this group of nurses being employed in nursing There is a somewhat larger percentage of nurses with non-nursing master's degrees employed in public health with a similar decrease in the percentage of this population employed in school health. Nurses in HSA 11 with non-nursing baccalaureate degrees are almost twice as likely to be employed school nursing as the comparable group in Illinois at large.

Type of Position Held

An analysis of the data was undertaken to determine if there is a relationship between the type of position held by nurses and their educational preparation for nursing. Table 20 provides an illustration of the relationship between type of position held by nurses in Illinois and their basic nursing education.

TABLE 20. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND BASIC NURSING EDUCATION BY ILLINOIS REGISTERED NURSES

| | | TENTIOTO MOTOTHIN | DD MOKOEO | |
|----------------|----------|-------------------|------------------------|---------------|
| TYPE | SAMPLE . | В | ASIC NURSING EDUCATION | ON |
| OF | SIZE | DIPLOMA | ASSOCIATE | BACCALAUREATE |
| EMPLOY | | | DEGREE | DEGREE |
| ADMINISTRATION | 7590 | 63.7% | 13.0% | 23.4% |
| CONSULTANT | 876 | 51.9% | 12.4% | 35.6% |
| INSTRUCTOR | 2634 | 42.6% | 9.0% | 48.4% |
| HEAD NURSE | 6840 | 64.3% | 17.4% | 18.3% |
| STAFF NURSE | 38511 | 53.2% | 24.5% | 22.3% |
| TOTAL | 56451 | 31302 | 11942 | 13207 |

Chi-square=1857.9, df=8, p<.01

There is a significant relationship between the type of position held by nurses and their basic nursing education with the majority of nurses in all types of positions except as instructors having attended diploma nursing education programs for their basic nursing education. Slightly less than one-half of the nurses in instructor positions received their basic nursing education in baccalaureate programs.

Nurses whose basic nursing education is an associate degree are least likely to be employed in all types of positions other than staff positions where 78.9% indicate employment. Those nurses whose basic nursing education is at the baccalaureate degree level are most frequently employed in positions as instructors, 9.6% of those nurses with basic nursing education of a baccalaureate employed as instructors compared to 3.6% of those with diploma basic education and 2.0% of those with associate degrees as their basic preparation. There is a somewhat comparable frequency of employment in nursing administration for nurses whose basic nursing education is either diploma, 15.4% or baccalaureate, 13.4%.

The data on type of positions held relative to basic nursing education by Health Service area is generally consistent with the State data for those nurses whose basic education was an associate degree. Also, the overall pattern for type of position held in HSAs 2, 6/7 and 8 varied little from the pattern in Illinois. Variations that were found were primarily in the greater percentage of nurses whose basic nursing education was a diploma employed as head nurses and staff nurses and a corresponding percentage of these positions being accounted for by nurses whose basic nursing education was at the

baccalaureate level. In HSA 3, nurses whose basic nursing education was a diploma were higher than State percentages for all types of positions with a corresponding decrease in all for those with basic preparation in nursing in a baccalaureate program. HSA 5 was the only health service area in which the associate degree nurses accounted for a higher percentage of the nurses in all positions, the major decrease being in those nurses whose basic nursing education was a baccalaureate degree.

Table 21 depicts the relationship between type of position held by nurses in Illinois and their highest degree held.

TABLE 21. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND HIGHEST DEGREE HELD

| BY | ILLINO | IS REGIS | TERED NU | JRSES | · · · · · · · · · · · · · · · · · · · | | | | | | |
|---------------|-------------|----------------------------|----------|-------|---------------------------------------|-------|-------|-------|--|--|--|
| TYPE | SAMPLE | SAMPLE HIGHEST DEGREE HELD | | | | | | | | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ | | | |
| POSITION | | | | BACC | BACC | MAST | MAST | EDD | | | |
| ADMINISTRATOR | 7617 | 43.6% | 9.9% | 19.4% | 10.7% | 9.4% | 5.8% | 1.3% | | | |
| CONSULTANT | 879 | 31.2% | 6.8% | 22.2% | 11.8% | 16.5% | 10.4% | 31.2% | | | |
| INSTRUCTOR | 2636 | 12.3% | 3.4% | 27.7% | 6.1% | 39.4% | 7.9% | 12.3% | | | |
| HEAD NURSE | 6864 | 54.9% | 15.1% | 20.5% | 6.8% | 1.7% | 1.0% | 0.0% | | | |
| STAFF NURSE | 38538 | 46.9% | 21.9% | 24.3% | 5.3% | 0.7% | 0.9% | 0.1% | | | |
| TOTAL | 56534 | 25752 | 10372 | 13157 | 3606 | 2286 | 1147 | 214 | | | |

Chi-square=14838.6, df=24, p<.01

There is a significant relationship between the type of position held and the highest degree held by nurses in Illinois. While nurses whose highest level of education is a diploma account for the greatest percentage of nurses employed in all types of positions except as instructors, those whose highest degree is a nursing master's degree account for the greatest percentage of nurses employed as instructors with those whose highest degree is a nursing baccalaureate second.

More than half of the nurses with no degree, 70.2%, an associate degree, 81.3%, a nursing or non-nursing baccalaureate degree, 57.0% and 71.2%, indicated employment as staff nurses. Nurses with a master's degree in nursing are the most frequently employed as instructors, 45.5% of the group. This same group and those with doctorates are least likely to be employed as staff nurses, 11.9% and 9.8% respectively. A negligible percent of dotorally prepared nurses are employed as head nurses in Illinois.

Tables 22-31 illustrate the relationship between type of position held and

the highest degree held by nurses in each Health Service Area.

TABLE 22. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND HIGHEST DEGREE HELD

| BY | ILLINOIS | REGISTE | RED NURS | SES IN HSA | 1 | · | | |
|---------------|----------|---------|-------------|------------|-----------|-------|-------|------|
| TYPE | SAMPLE | | · v- | HIGHEST | DEGREE HE | LD | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| POSITION | | | ··········· | BACC | BACC | MAST | MAST | EDD |
| ADMINISTRATOR | 309 | 56.0% | 13.6% | 14.9% | 6.1% | 6.8% | 1.9% | 0.6% |
| CONSULTANT | 27 | 59.3% | 7.4% | 11.1% | 11.1% | 7.4% | 3.7% | 0.0% |
| INSTRUCTOR | 144 | 18.1% | 2.1% | 22.2% | 5.6% | 37.5% | 7.6% | 6.9% |
| HEAD NURSE | 334 | 71.3% | 15.0% | 8.4% | 3.9% | 0.6% | 0.9% | 0.0% |
| STAFF NURSE | 1591 | 59.5% | 24.8% | 10.8% | 3.3% | 0.6% | 0.9% | 0.0% |
| TOTAL | 2405 | 1400 | 492 | 281 | 96 | 88 | 3 | 12 |

Chi-square=815.1, df=24, p<.01

There is a significant relationship between the type of position held and the highest degree held by nurses in HSA 1 with nurses whose highest educational preparation is a diploma in nursing accounting for more than half of the nurses employed in all types of positions except as instructors. Combined with those nurses whose highest degree is an associate degree, the two groups account for over three-fourths of the staff nurses. Nurses with a nursing master's degree and those with a nursing baccalaureate degree together account for approximately 70% of the nurses employed as instructors.

The figures for HSA 1 vary primarily in the nurses with no degree and those with a nursing baccalaureate from the statewide pattern with diploma nurses accounting for a higher percentage of nurses employed in all types of positions except instructors in HSA 1 than Illinois overall. Nurses in HSA 1 whose highest degree is a nursing baccalaureate degree account for a somewhat smaller percentage of those nurses employed as consultants, head nurses or staff nurses than in Illinois.

Over half of the nurses with no degree, 67.6%, an associate degree, 80.3%, a nursing baccalaureate degree, 61.2%, or a non-nursing baccalaureate degree, 55.2%, are employed as staff nurses. More than half of the nurses whose highest degree is a nursing master's degree, 61.4%, or a doctorate, 83.2%, are employed as instructors. Nurses whose highest degree is a non-nursing master's degree are primarily employed as staff nurses, 41.7%, instructors, 30.6%, or administrators, 16.7%.

TABLE 23. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND HIGHEST DEGREE HELD

| TYPE | SAMPLE | | | HIG | HEST DEGI | REE HELD | | |
|---------------|--------|-------|-------|-------|-----------|----------|-------|------|
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| POSITION | ··· | | | BACC | BACC | MAST | MAST | EDD |
| administrator | 399 | 60.4% | 11.3% | 12.3% | 6.8% | 5.3% | 3.3% | 0.8% |
| CONSULTANT | 40 | 57.5% | 15.0% | 12.5% | 12.5% | 0.0% | 2.5% | 0.0% |
| INSTRUCTOR | 149 | 10.7% | 2.7% | 27.5% | 6.0% | 36.9% | 14.1% | 2.0% |
| HEAD NURSE | 416 | 73.1% | 14.9% | 8.7% | 2.9% | 0.0% | 0.5% | 0.0% |
| STAFF NURSE | 2151 | 59.6% | 25.6% | 10.4% | 3.8% | 0.3% | 0.3% | 0.0% |
| TOTAL | 3155 | 1866 | 677 | 355 | 135 | 82 | 44 | 6 |

Chi-square=1181.7, df=24, p<.01

There is a significant relationship between the type of position held and the highest degree for nurses in HSA 2. Nurses with no degree account for more than half of the nurses employed in all types of positions except as instructors while nurses with baccalaureate and master's degrees in nursing account for more than half of the instructors in HSA 2. None of the nurses with doctoral preparation are employed as consultants as are none of those with nursing master's degrees. Likewise, none of the nurses whose highest degree is a nursing master's degree are employed as head nurses.

While the pattern for type of position as related to highest degree held by nurses in HSA 2 is generally consistent with the Illinois pattern, there are several notable differences. The nurses with no degree in HSA 2 account for higher percentages of the administrators, consultants, head nurses and staff nurses than in Illinois overall. There is a smaller percentage of the consultants, head nurses and staff nurses whose highest degree is a nursing baccalaureate as well as a smaller percentage of nurses with a non-nursing master's degree constituting the consultants and instructors than is found in Illinois as a whole.

While more than half of the nurses in HSA 2 with no degree, 68.7%, an associate degree, 82.5%, a nursing baccalaureate, 63.1%, or a non-nursing baccalaureate, 60.7% are employed as staff nurses, nurses with advanced degrees are most frequently employed as instructors. Half of the doctorally prepared, 67.1% of those with a nursing master's degree and 47.7% of those with non-nursing master's degrees are employed as instructors.

TABLE 24. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND HIGHEST DEGREE HELD

BY ILLINOIS REGISTERED NURSES IN HSA 3

| TYPE | SAMPLE | | | HIG | HEST DEG | REE HELD | | |
|---------------|--------|-------|-------|-------|----------|----------|-------|------|
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| POSITION | | | | BACC | BACC | MAST | MAST | EDD |
| ADMINISTRATOR | 422 | 59.7% | 8.5% | 13.0% | 9.2% | 5.0% | 4.0% | 0.5% |
| CONSULTANT | 48 | 45.8% | 6.3% | 14.6% | 10.4% | 6.3% | 16.7% | 0.0% |
| INSTRUCTOR | 116 | 18.1% | 3.4% | 43.1% | 12.1% | 13.8% | 6.9% | 2.6% |
| HEAD NURSE | 270 | 71.1% | 11.9% | 10.4% | 5.9% | 0.0% | 0.7% | 0.0% |
| STAFF NURSE | 1646 | 61.5% | 22.8% | 10.1% | 4.9% | 0.1% | 0.4% | 0.1% |
| TOTAL | 2502 | 1500 | 451 | 306 | 155 | 42 | 42 | 6 |

Chi-square=530.8, df=24, p<.01

There is a significant relationship between type of position held and highest degree for nurses in HSA 3 with nurses holding no degree accounting for more than half of the administrators, head nurses and staff nurses and the greatest percentage of instructors holding a nursing baccalaureate degree. Diploma nurses account for somewhat less than half of the consultants with the majority of the remainder holding a nursing baccalaureate or a non-nursing baccalaureate degree.

When compared with Illinois as a whole, there are several variations to the pattern of type of position held relative to highest degree for nurses in HSA 3. Nurses with no degree account for a larger percentage of the nurses in all types of positions except instructors. Nurses with the highest degree of a nursing baccalaureate account for a substantially larger percentage of the instructors in HSA 3 as compared to Illinois. Correspondingly the nurses with a nursing baccalaureate degree account for a smaller percentage of the head nurses and staff nurses. Also notable is the decreased percentage of nurses whose highest degree is a nursing master's degree accounting for the consultants and instructors in HSA 3 as compared with Illinois overall.

As in other HSAs, the majority of nurses in HSA 3 with no degree, 67.5%, as associate degree, 83.4%, a nursing baccalaureate, 54.2% or a non-nursing baccalaureate, 52.3% are employed as staff nurses. While 50.0% of the nurses whose highest degree is a nursing master's are employed as administrators, 38.1% are employed as instructors. Approximately one-fourth of the nurses with a non-nursing baccalaureate degrees are employed as administrators as are 40.5% of those with non-nursing master's degrees and 33.3% of those with doctorates.

TABLE 25. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND HIGHEST DEGREE HELD

| BY ILLINOIS REGISTERED NURSES IN HSA 4 | | | | | | | | | | |
|--|--------|-------|---------------------|-------|-------|-------|-------|------|--|--|
| TYPE | SAMPLE | | HIGHEST DEGREE HELD | | | | | | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ | | |
| POSITION . | ···· | | | BACC | BACC | MAST | MAST | EDD | | |
| ADMINISTRATOR | 3 448 | 53.5% | 10.0% | 16.5% | 8.9% | 4.0% | 1.1% | 1.1% | | |
| CONSULTANT | 38 | 50.0% | 7.9% | 10.5% | 15.8% | 10.5% | 5.3% | 0.0% | | |
| INSTRUCTOR | 172 | 14.0% | 5.2% | 31.4% | 10.5% | 25.0% | 10.5% | 3.5% | | |
| HEAD NURSE | 401 | 68.8% | 14.0% | 11.7% | 4.0% | 0.7% | 0.7% | 0.0% | | |
| STAFF NURSE | 1971 | 59.3% | 20.5% | 13.6% | 5.3% | 0.5% | 0.8% | 0.1% | | |
| TOTAL | 3030 | 1727 | 517 | 448 | 184 | 77 | 65 | 12 | | |

Chi-square=732.4, df=24, p<.01

There is a significant relationship between the type of position held and the highest degree held by nurses in HSA 4. Nurse with no degree account for half or more than half of the nurses in all types of positions except instructor. Together the nurses with nursing baccalaureate and master's degrees account for the majority of nurses employed as instructors in HSA 4.

While the pattern for type of position as related to highest degree held by nurses in HSA 4 varies little from the statewide pattern, there is an increased percentage of the administrators, consultants, head nurses and staff nurses who hold no degree in HSA 4. In contrast, there is a smaller proportion of the consultants and head nurses who hold nursing baccalaureate degrees as their highest degree and a smaller percentage of nurses with nursing master's degrees employed as instructors in HSA 4 as compared to Illinois at large.

As in previous HSAs, nurses with no degree, 67.7%, associate degrees, 78.1%, nursing baccalaureates, 60.0%, and non-nursing baccalaureate degrees, 56.5% are most frequently employed in staff positions. Nurses with nursing master's degrees are most frequently employed as instructors, 55.8%. Of the nurses in HSA 4 with non-nursing master's degrees, 41.5% are employed as administators, 27.7% as instructors, and 23.1% as staff nurses.

TABLE 26. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND HIGHEST DEGREE HELD

| | Y ILLINOIS | REGISTE | RED NURS | ES IN HSA | 1 5 | | | |
|--------------|------------|-------------|----------|-----------|----------|-------|-------|------|
| TYPE | SAMPLE | | | HIGHES | T DEGREE | HELD | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| POSITION | | | | BACC | BACC | MAST | MAST | EDD |
| ADMINISTRATO | R 430 | 46.0% | 28.1% | 12.1% | 8.6% | 2.8% | 1.9% | 0.5% |
| CONSULTANT | 26 | 46.2% | 26.9% | 15.4% | 7.7% | 3.8% | 0.0% | 0.0% |
| INSTRUCTOR | 102 | 14.7% | 7.8% | 35.3% | 10.8% | 23.5% | 7.8% | 0.0% |
| HEAD NURSE | 225 | 43.1% | 39.6% | 9.3% | 7.1% | 0.9% | 0.0% | 0.0% |
| STAFF NURSE | 1007 | 38.3% | 45.8% | 10.7% | 4.7% | 0.2% | 0.2% | 0.1% |
| TOTAL | 1790 | 708 | 686 | 221 | 113 | 41 | 18 | 3 |

Chi-square=418.3, df=24, p<.01

There is a significant relationship between the type of position held and the highest degree for nurses in HSA 5. While nurses with no degree constitute the largest proportion of nurses employed as administrators, consultants and head nurses, nurses with associate degree account for the greatest percentage of staff nurses. Nurses with a nursing baccalaureate degree account for the greatest proportion of instructors with those nurses with a highest degree of a master's in nursing second.

The increased utilization of associate degree nurses is apparent when the relationship between type of position and highest degree held for nurses in HSA 5 is compared to Illinois. Without exception the nurses with associate degree account for an increased percentage of nurses employed in all types of positions. Another variation from the statewide pattern is found in diploma nurses who account for an increased percentage of the consultants and a decreased percentage of the head and staff nurses in HSA 5. The utilization of nurses with master's degrees in nursing also varies from the statewide pattern with these nurses constituting a smaller percentage of the consultants and instructors in HSA 5 than in Illinois.

Nurses with no degree or an associate degree are employed more than half of the time in staff nurse positions, 54.5% and 67.2% respectively. Those nurses whose highest degrees are nursing baccalaureates are most frequently employed as staff nurses, 48.9%, followed by employment as administrators, 23.5%, and instructors, 16.3%. Nurses in HSA 5 with a highest degree of a nursing baccalaureate are most often employed as staff nurses, 41.6%, and administrators, 32.7%. More than half of the nurses with nursing master's

degrees are employed as instructors, 58.5% while those nurses with non-nursing master's are divided primarily between administration and instruction, 44.4% in each.

TABLE 27. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND HIGHEST DEGREE HELD

| BY | ILLINOIS | REGIST | ERED NURS | ES IN HS | A 6-7 | | | | |
|---------------|----------|--------|---------------------|----------|-------|-------|-------|------|--|
| TYPE | SAMPLE | | HIGHEST DEGREE HELD | | | | | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ | |
| POSITION | | | | BACC | BACC | MAST | MAST | EDD | |
| ADMINISTRATOR | 2962 | 35.2% | 7.5% | 23.8% | 12.3% | 12.8% | 6.9% | 1.6% | |
| CONSULTANT | 411 | 19.5% | 4.1% | 25.5% | 12.4% | 24.6% | 12.2% | 1.7% | |
| INSTRUCTOR | 933 | 7.7% | 3.0% | 24.5% | 4.7% | 49.7% | 6.8% | 3.5% | |
| HEAD NURSE | 2973 | 46.8% | 13.7% | 27.8% | 8.4% | 2.2% | 1.0% | 0.0% | |
| STAFF NURSE | 18006 | 40.9% | 19.0% | 32.0% | 6.0% | 0.9% | 1.0% | 0.1% | |
| TOTAL | 25345 | 9960 | 4095 | 7650 | 1798 | 1203 | 539 | 100 | |

Chi-square=7719.6, df=24, p<.01

There is a significant relationship between the type of position held and the highest degree for nurses in HSA 6/7. While nurses with no degree account for the largest percentage of nurses employed as administrators, head and staff nurses, those with a highest degree of nursing master's degree constitute the greatest percentage of the instructors. Nurses with nursing baccalaureate and master's degrees account for nearly equal proportions of those employed as consultants.

The pattern for HSA 6/7 as compared to Illinois for type of positions relative to highest degree shows minimal variation. There is a generally lower percentage of nurses with no degree employed in all positions with a corresponding increase in employment of nurses whose highest degree is a nursing baccalaureate in all except as instructors. Associated with this is the increased proportion of instructors who hold a nursing master's degree as the highest degree in HSA 6/7 as compared to Illinois overall.

Over half of the nurses in HSA 6/7 with no degree, an associate degree, a nursing baccalaureate degree or a non-nursing baccalaureate degree are employed as staff nurses, 74.0%, 83.4%, 75.4% and 60.5% respectively. Nurses with master's degrees in nursing are most frequently employed as instructors, 41.4% and administrators, 31.4% while nurses with non-nursing master's degrees are most frequently employed as administrators, 37.7%, and staff nurses, 34.9%. Doctorally prepared nurses are split primarily between administration, 46.0%

and instruction, 35.0%.

TABLE 28. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND HIGHEST DEGREE HELD

| BY | ILLINOIS | REGIST | ERED NURS | ES IN HS | A 8 | · | | |
|---------------|----------|--------|-----------|----------|-----------|----------|-------|------|
| TYPE | SAMPLE | | | HIG | HEST DEGI | REE HELD | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| POSITION | - | | | BACC | BACC | MAST | MAST | EDD |
| ADMINISTRATOR | 465 | 46.0% | 8.6% | 16.1% | 14.8% | 7.3% | 6.5% | 0.6% |
| CONSULTANT | 41 | 34.1% | 12.2% | 31.7% | 12.2% | 9.88 | 0.0% | 0.0% |
| INSTRUCTOR | 129 | 15.5% | 5.4% | 24.8% | 7.8% | 38.8% | 7.8% | 0.0% |
| HEAD NURSE | 402 | 55.7% | 17.7% | 15.7% | 8.7% | 1.0% | 1.2% | 0.0% |
| STAFF NURSE | 2746 | 45.8% | 27.4% | 17.7% | 6.6% | 0.4% | 1.1% | 0.0% |
| TOTAL | 3783 | 1731 | 903 | 670 | 299 | 102 | 74 | 4_ |

Chi-square=1002.1, df=24, p<.01

There is a significant relationship between type of position held and highest degree of nurses in HSA 8 with half of the head nurses and the greatest percentage of nurses employed as administrators and staff nurses holding no degree. Nurses with a nursing master's degree account for the greatest proportion of instructors with those with nursing baccalaureate degrees next. Nurses with nursing baccalaureate degrees also account for nearly one-third of the consultants. All doctorally prepared nurses in HSA 8 are employed as administrators. The pattern for type of position as related to highest degree held by nurses in HSA 8 varies little from the pattern for Illinois as a whole.

Again the majority of nurses holding no degree, an associate degree, a nursing baccalaureate degree or a non-nursing baccalaureate degree are employed as staff nurses, 72.7%, 86.4%, 72.7% and 60.2% respectively. While nearly one-half, 49.0%, of the nurses in HSA 8 with a nursing master's degree are employed as instructors, one-third are employed as administrators. Nurses with non-nursing master's degrees are employed primarily as administrators, 40.5%, or staff nurses, 39.2% with 13.5% as instructors.

TABLE 29. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND HIGHEST DEGREE HELD

| BY ILLINOIS REGISTERED NURSES IN HSA 9 | | | | | | | | | | |
|--|--------|---|-------|--------|----------|-------|-------|------|--|--|
| TYPE | SAMPLE | *************************************** | | HIGHES | T DEGREE | HELD | | | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ | | |
| POSITION | | | | BACC | BACC | MAST | MAST | EDD | | |
| ADMINISTRATO | OR 224 | 38.8% | 11.2% | 16.5% | 17.0% | 9.8% | 4.9% | 1.8% | | |
| CONSULTANT | 19 | 42.1% | 5.3% | 15.8% | 21.1% | 5.3% | 10.5% | 0.0% | | |
| INSTRUCTOR | 92 | 9.8% | 1.1% | 27.2% | 7.6% | 47.8% | 5.4% | 1.1% | | |
| HEAD NURSE | 227 | 55.5% | 22.5% | 13.7% | 7.9% | 0.0% | 0.0% | 0.4% | | |
| STAFF NURSE | 969 | 55.6% | 27.0% | 12.6% | 4.5% | 0.0% | 0.2% | 0.0% | | |
| TOTAL | 1531 | 769 | 340 | 218 | 111 | 67 | 20 | 6 | | |

Chi-square=683.1, df=24, p<.01

"here is a significant relationship between type of position held and highest degree for nurses in HSA 9. While more than half of the nurses employed as head and staff nurses hold no degree, more than half of the instructors hold advanced degrees with slightly more than one-fourth holding a nursing baccalaureate degree. Nurses with no degree account for the greatest percentage of administrators and consultants.

When compared with Illinois data, the results for HSA 9 with respect to type of position held relative to highest degree vary in several areas. Nurses with baccalaureate degrees in nursing account for a smaller percentage of the staff nurses in HSA 9 than in Illinois. While nurses with no degrees and non-nursing baccalaureate degrees constitute a larger proportion of the consultants, nurses with nursing master's degrees account for a smaller percentage than found in Illinois overall.

Staff nursing accounts for the type of position held by more than half of the nurses in HSA 9 with no degree, an associate degree or a nursing baccalaureate degree, 70.1%, 77.1% and 56.0% respectively. Nurses with nursing master's degrees are split primarily between being instructors, 65.7%, and administrators, 32.8%. Of those nurses in HSA 9 whose highest degree is a non-nursing master's degree 55.0% are employed in administrative positions and 25.0% as instructors. Nurses with non-nursing baccalaureate degrees in HSA 9 tend to be employed as administrators, 34.2%, or staff nurses, 39.6%.

TABLE 30. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND HIGHEST DEGREE HELD

| *** | BY ILLINOI | S REGIST | ERED NURS | ES IN HS | A 10 | | | |
|-------------|------------|----------|-----------|----------|----------|-------|-------|------|
| TYPE | SAMPLE | | | HIGHEST | DEGREE I | HELD | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| POSITION | | | | BACC | BACC | MAST | MAST | EDD |
| ADMINISTRAT | OR 123 | 55.3% | 8.9% | 18.7% | 3.3% | 8.9% | 4.1% | 88.0 |
| CONSULTANT | 13 | 53.8% | 0.0% | 7.1% | 7.7% | 23.1% | 7.7% | 0.0% |
| INSTRUCTOR | 53 | 11.3% | 3.8% | 35.8% | 3.8% | 41.5% | 3.8% | 0.0% |
| HEAD NURSE | 127 | 74.0% | 8.7% | 14.2% | 3.1% | 0.0% | 0.0% | 0.0% |
| STAFF NURSE | 770 | 67.4% | 21.7% | 9.2% | 1.4% | 0.0% | 0.3% | 0.0% |
| TOTAL | 1086 | 694 | 191 | 132 | 22 | 36 | 10 | 1_ |

Chi-square=422.3, df=24, p<.01

There is a significant relationship between type of position held and highest degree for nurses in HSA 10 with more than half of the administrators, consultants, head nurses and staff nurses holding no degree. Of the nurses employed in nursing education the majority hold either a baccalaureate or master's degree in nursing. There are no nurse consultants in HSA 10 with an associate degree nor are any of the nurses with advanced degrees employed as head nurses.

The most notable variations from the State pattern for nurses in HSA 10 are found in the type of positions held by nurses with no degree. These nurses constitute a larger percentage of all of the types of positions except instructors. Correspondingly, nurses with non-nursing baccalaureates account for smaller proportions in all types of positions. While the percentage of nurses with nursing baccalaureate degrees constituting the consultants is lower in HSA 10 than Illinois, this group does account for a higher percentage of the instructors and staff nurses in HSA 10.

Of the nurses with no degree, an associate degree, a nursing baccalaureate or non-nursing baccalaureate degree, half or more are employed as staff nurses, 74.8%, 87.4%, 53.8% and 50.0% respectively. Nurses with a highest degree of a nursing master's in HSA 10 are most frequently employed as instructors, 61.1%, or administrators, 30.6%. Half of the nurses with non-nursing master's degrees are employed in administrative positions with 20.0% as instructors.

TABLE 31. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND HIGHEST DEGREE HELD

| | BA ITTINO | IS REGIST | ERED NURS | SES IN HS. | A 11 | | | |
|-------------|-----------|-----------|-----------|------------|----------|-------|-------|------|
| TYPE | SAMPLE | | | HIGHEST | DEGREE H | ELD | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| POSITION | | | | BACC | BACC | MAST | MAST | EDD |
| ADMINISTRAT | OR 255 | 49.0% | 13.7% | 19.2% | 8.2% | 2.7% | 6.3% | 0.8% |
| CONSULTANT | 28 | 35.7% | 7.1% | 17.9% | 14.3% | 7.1% | 14.3% | 3.6% |
| INSTRUCTOR | 110 | 21.8% | 4.5% | 32.7% | 5.5% | 24.5% | 6.4% | 4.5% |
| HEAD NURSE | 184 | 57.6% | 23.9% | 12.0% | 4.9% | 0.5% | 1.1% | 0.0% |
| STAFF NURSE | 1317 | 45.1% | 34.5% | 15.0% | 4.3% | 0.2% | 1.0% | 0.0% |
| TOTAL | 1894 | 859 | 540 | 309 | 96 | 40 | 4 | 8 |

Chi-square=523.6, df=24, p<.01

There is a signific int relationship between the type of position held and highest degrees by nurses in HSA 11 with the greatest percentage of adminstrators, consultants, head and staff nurses being accounted for by nurses with no degree. The majority of instructors are comprised of nurses with baccalaureate and master's degrees in nursing.

In comparing the data for HSA 11 with that for Illinois, the proportion of head and staff nurses positions accounted for by associate degree nurses is lower while the percentage accounted for by nurses with nursing baccalaureate degrees is higher. Another variation from the State pattern is found with respect to types of positions held by nurses with master's degrees in nursing where the HSA 11 percentage is lower for consultants and instructors than is the comparative Illinois percentage.

As in most of the State, the majority of nurses in HSA 11 with no degree, an associate degree and a nursing or non-nursing baccalaureate degree are employed as staff nurses, 69.2%, 84.1%, 63.8% and 58.3% respectively. The majority of nurses with nursing master's degrees are employed as instructors, 67.5% while those with non-nursing master's degrees are split primarily between administration, 38.1%, and staff nursing, 31.0%.

An analysis of the relationship between type of position held and current enrollment by Illinois nurses was also undertaken for this study. Table 32 demonstrates the enrollment pattern of nurses in Illinois as related to the type of nursing position held.

TABLE 32. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND CURRENT ENROLLMENT

| | OR ILLING | DIS NURSES | 3 | | | | | | | |
|--------------|-----------|------------|----------------------------|-------|-------|-------|-------|-------|--|--|
| TYPE | SAMPLE | | CURRENT ENROLLMENT PROGRAM | | | | | | | |
| OF | SIZE | ADN | NURSE | OTHER | NURSE | OTHER | NURSE | OTHER | | |
| POSITION | | | BACC | BACC | MAST | MAST | DOCT | DOCT | | |
| ADMINISTRATO | R 2066 | 12.4% | 31.3% | 22.2% | 12.3% | 17.3% | 1.3% | 3.2% | | |
| CONSULTANT | 279 | 9.3% | 25.1% | 23.3% | 16.1% | 19.0% | 2.9% | 4.3% | | |
| INSTRUCTOR | 985 | 4.5% | 19.7% | 8.2% | 34.1% | 13.5% | 5.0% | 15.0% | | |
| HEAD NURSE | 1757 | 19.2% | 43.8% | 18.2% | 10.2% | 8.0% | 0.2% | 0.3% | | |
| STAFF NURSE | 8647 | 29.5% | 44.2% | 13.6% | 8.0% | 4.1% | 0.2% | 0.5% | | |
| TOTAL | 13684 | 3209 | 5495 | 2092 | 1491 | 1032 | 102 | 263 | | |

Chi-square=3052.4, df=24, p<.01

There is a significant relationship between type of position held and current enrollment for nurses in Illinois. Of the head nurses and staff nurses enrolled in educational programs, the greatest percentage are in nursing baccalaureate programs while those instructors enrolled are primarily enrolled in programs leading to advanced degrees, over 60%. Administrators who are enrolled are most frequently enrolled in baccalaureate programs, nursing or non-nursing as are consultants. The figures for enrollment in associate degree programs are presumed to reflect nurses earning credits to apply to baccalaureate degrees.

Of the nurses enrolled in educational programs 23.5% are enrolled in associate degree programs with 79.4% of those starf nurses. Those nurses enrolled in baccalaureate programs account for 40.2% of the total enrolled with 69.6% being staff nurses. The nurses enrolled in non-nursing education programs account for 15.3% of the nurses enrolled with 56.0% being staff nurses and 21.9% administrators. Nurses enrolled in nursing master's degree programs account for 10.9% of those nurses enrolled with 46.5% being staff nurses, 21.4% instructors, 17.0% administrators, and 12.1% head nurses. Seven and one-half percent (7.5%) of the enrolled nurses are in non-nursing baccalaureate programs with 34.7% being administrators and 34.4% staff nurses. Nurses enrolled in nursing doctorate programs account for 0.7% of the nurses enrolled with 46.1% being instructors and 25.5% being administrators. There are 1.9% of the enrolled nurses in non-nursing doctoral programs and 53.2% are instructors with 25.5% being administrators.

Tables 33-42 depict the relationship between type of position and current enrollment of each HSA.

TABLE 33. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND CURRENT ENROLLMENT

FOR ILLINOIS NURSES IN HSA 1 TYPE SAMPLE CURRENT ENROLLMENT PROGRAM OF SIZE ADN NURSE OTHER NURSE OTHER NURSE OTHER POSITION BACC BACC MAST MAST DOCT DOCT ADMINISTRATOR 76 19.7% 40.8% 15.8% 10.5% 10.5% 0.0% 2.6% CONSULTANT 11 0.0% 54.5% 27.3% 0.0% 18.2% 0.0% 0.0% INSTRUCTOR 44 2.3% 38.6% 9.1% 29.5% 13.6% 2.3% 4.5% HEAD NURSE 62 32.3% 43.5% 16.1% 4.8% 3.2% 0.0% 0.0% STAFF NURSE 294 33.7% 50.3% 9.5% 4.4% 2.0% 0.0% 0.0% 487 135 229 37 24 7

Chi-square=105.9, df=24, p<.01

There is a significant relationship between type of position held and current enrollment of nurses in HSA 1. The pattern varies from that in Illinois as a whole in the percentages of administrators, consultants and instructors enrolled in nursing baccalaureate programs being higher for HSA 1. There are no nursing administrators enrolled in nursing doctorate programs, no consultants enrolled in associate degree, nursing master's degree or doctorate programs and no head or staff nurses enrolled in doctoral programs.

TABLE 34. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND CURRENT ENROLLMENT

| FC | R ILLINO | IS NURSES | IN HSA | 2 | | | | |
|---------------|----------|-----------|-------------|---------|-----------|-----------|-------|----------|
| TYPE | SAMPLE | | | CURRENT | ENROLLMEN | NT PROGRA | M/ | <u> </u> |
| OF | SIZE | ADN | NURSE | OTHER | NURSE | OTHER | NURSE | OTHER |
| POSITION | | | BACC | BACC | MAST | MAST | DOCT | DOCT |
| ADMINISTRATOR | 95 | 21.1% | 35.8% | 23.2% | 3.2% | 13.7% | 0.0% | 3.2% |
| CONSULTANT | 12 | 16.7% | 25.0% | 33.3% | 16.7% | 8.3% | 0.0% | 0.0% |
| INSTRUCTOR | 54 | 0.0% | 18.5% | 9.3% | 42.6% | 16.7% | 0.0% | 13.0% |
| HEAD NURSE | 90 | 21.1% | 44.4% | 26.7% | 3.3% | 4.4% | 0.0% | 0.0% |
| STAFF NURSE | 426 | 45.8% | 32.6% | 15.3% | 3.5% | 2.8% | 0.0% | 0.0% |
| TOTAL | 677 | 236 | 226 | 120 | 4.6 | 39 | 0 | 10 |

Chi-square=262.8, df=20, p<.01

There is a significant relationship between type of position held and current educational enrollment for nurses in HSA 2. While the pattern for enrollment in HSA 2 is relatively consistent with that for Illinois at large,

there is increased enrollment of administrators, consultants and staff nurses in associate degree programs from that in the State. A lower percentage of staff nurses in HSA 2 are enrolled in nursing baccalaureate programs as are their lower percentages of administrators enrolled in nursing master's programs and consultants in non-nursing master's programs. Consultants, head nurses and staff nurses account for none of the nurses enrolled in doctoral programs, and instructors account for none of those enrolled in associate degree programs with no nurses from HSA 2 enrolled in nursing doctoral programs.

TABLE 35. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND CURRENT ENROLLMENT

| FO | R ILLINO | IS NURSES | IN HSA | 3 | | | | |
|---------------|----------|-----------|--------|---------|---------|-----------|-------|-------|
| TYPE | SAMPLE | | | CURRENT | ENROLLM | ENT PROGR | AM | |
| OF | SIZE | ADN | NURSE | OTHER | NURSE | OTHER | NURSE | OTHER |
| POSITION | | | BACC | BACC | MAST | MAST | DOCT | DOCT |
| ADMINISTRATOR | 97 | 16.5% | 30.9% | 23.7% | 6.2% | 18.6% | 0.0% | 4.1% |
| CONSULTANT | 10 | 20.0% | 10.0% | 20.2% | 10.0% | 30.0% | 0.0% | 10.0% |
| INSTRUCTOR | 55 | 3.6% | 20.0% | 9.1% | 30.9% | 29.1% | 0.0% | 7.3% |
| HEAD NURSE | 43 | 34.9% | 30.2% | 20.9% | 0.0% | 11.6% | 0.0% | 2.3% |
| STAFF NURSE | 304 | 38.2% | 43.4% | 11.8% | 3.3% | 3.0% | 0.0% | 0.3% |
| TOTAL | 509 | 151 | 187 | 75 | 34 | 51 | 0 | 11 |

Chi-square=165.9, df=20, p<.01

There is a significant relationship between type of position held and current educational enrollment of nurses in HSA 3 with the greatest percentages being enrolled in associate and nursing baccalaureate programs and no nurses being enrolled in nursing doctorate programs. The enrollment pattern for nurses in HSA 3 differs from the pattern for Illinois in the percentage of consultants, head nurses and staff nurses enrolled in associate degree programs being higher than the comparable groups for Illinois at large. While consultants account for a smaller percentage of the nurses enrolled in nursing baccalaureate programs in HSA 3 than in Illinois, they account for a larger percentage of those enrolled in non-nursing master's and doctoral programs. Instructors account for a lower percentage of nurses enrolled in non-nursing doctoral programs and a higher percentage of those enrolled in non-nursing master's degree programs. Head nurses account for none of those enrolled in nursing master's degree programs.

TABLE 36. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND CURRENT ENROLLMENT

FOR ILLINOIS NURSES IN HSA 4 TYPE SAMPLE CURRENT ENROLLMENT PROGRAM OF SIZE ADN NURSE OTHER NURSE OTHER NURSE OTHER POSITION BACC BACC MAST MAST DOCT DOCT ADMINISTRATOR 94 11.7% 31.9% 23.4% 7.4% 22.3% 0.0% 3.2% CONSULTANT 10 10.0% 20.0% 10.0% 20.0% 40.0% 0.0% 0.0% INSTRUCTOR 55 5.5% 10.9% 7.3% 38.2% 21.8% 7.3% 9.1% HEAD NURSE 53 34.0% 32.1% 20.8% 7.5% 5.7% 0.0% 0.0% STAFF NURSE 330 36.1% 40.6% 14.8% 4.5% 3.6% 0.3% 0.0% 542 <u> 152 189</u> 90 48 5.0

Chi-square=208.4, df=24, p<.01

There is a significant relationship between the type of p sition held and current educational enrollment of nurses in HSA 4. Aside from there being no administrators enrolled in nursing doctoral programs and no consultants or head nurses in any doctoral programs, there are minimal variations from the enrollment pattern for the State. Head nurses do account for a somewhat larger percentage of nurses enrolled in associate degree programs and instructors and head nurses for a larger percentage of nurses enrolled in nursing baccalaureate programs. Consultants, likewise, account for an increased proportion of the nurses enrolled in non-nursing baccalaureate programs in HSA 4 than in Illinois.

TABLE 37. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND CURRENT ENROLLMENT

FOR ILLINOIS NURSES IN HSA 5 TYPE SAMPLE CURRENT ENROLLMENT PROGRAM OF SIZE ADN NURSE OTHER NURSE OTHER NURSE OTHER POSITION BACC BACC MAST MAST DOCT DOCT ADMINISTRATOR 121 31.4% 36.4% 16.5% 5.8% 7.4% 1.7% 0.8% CONSULTANT 8 25.0% 50.0% 12.5% 0.0% 0.0% 0.0% 12.5% INSTRUCTOR 49 4.1% 22.4% 8.2% 40.8% 16.3% 0.0% 8.2왕 HEAD NURSE 68 41.2% 41.2% 8.8% 4.4% 4.48 0.0% 0.0% STAFF NURSE 244 48.4% 41.8% 5.7% 3.3% 0.8% 0.0% 0.0% TOTAL 490 188 189 45 38 _22 6

Chi-square=178.9, df=24, p<.01

There is a significant relationship between type of position held and current enrollment of nurses in HSA 5 with no nurses employed as consultants

enrolled in advanced degree programs other than non-nursing doctorate, no instructors enrolled in nursing doctorate programs, and no head or staff nurses enrolled in any doctoral programs. Other variations from the statewide pattern are in the increased percentages of associate degree enrollments accounted for by administrators, consultants, head nurses and staff nurses in HSA 5. Consultants also account for a higher percentage of those nurses enrolled in baccalaureate programs, nursing and non-nursing.

TABLE 38. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND CURRENT ENROLLMENT

| <u>F</u> | OR ILLINC | IS NURSES | IN HSA | 6/7 | | | | | |
|--------------|-----------|-----------|--------|----------------------------|-------|-------|-------|-------|--|
| TYPE | SAMPLE | | | CURRENT ENROLLMENT PROGRAM | | | | | |
| OF | SIZE | ADN | NURSE | OTHER | NURSE | OTHER | NURSE | OTHER | |
| POSITION | | | BACC | BACC | MAST | MAST | DOCT | DOCT | |
| ADMINISTRATO | R 915 | 8.7% | 27.7% | 23.0% | 15.1% | 20.1% | 2.2% | 3.3% | |
| CONSULTANT | 133 | 5.3% | 20.3% | 21.8% | 21.1% | 21.1% | 5.3% | 5.3% | |
| INSTRUCTOR | 344 | 4.7% | 16.0% | 7.8% | 35.5% | 11.6% | 7.8% | 16.6% | |
| HEAD NURSE | 882 | 14.4% | 45.0% | 17.7% | 13.6% | 8.8% | 0.2% | 0.2% | |
| STAFF NURSE | 4403 | 23.2% | 46.3% | 14.3% | 10.4% | 4.9% | 0.2% | 0.6% | |
| TOTAL | 6677 | 1251 | 2771 | 1050 | 868_ | 547 | 67 | 123 | |

Chi-square=1460.2, df=24, p<.01

There is a significant relationship between type of position held and current educational enrollment for nurses in HSA 6/7. The pattern of enrollment if consistent with that for Illinois as a whole with head and staff nurses accounting for the greatest percentage of nurses enrolled in nursing baccalaureate programs and instructors the greatest proportion of nurses enrolled in nursing master's programs.

TABLE 39. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND CURRENT ENROLLMENT

FOR ILLINOIS NURSES IN HSA 8 TYPE SAMPLE CURRENT ENROLLMENT PROGRAM OF SIZE ADN NURSE OTHER NURSE OTHER NURSE OTHER POSITION BACC BACC MAST MAST DOCT DOCT ADMINISTRATOR 133 10.5% 33.1% 29.3% 6.0% 19.5% 0.0% 19.5% CONSULTANT 15 20.0% 26.7% 26.7% 6.7% 13.3% 0.0% 6.7% INSTRUCTOR 38 13.2% 21.1% 15.8% 21.1% 13.2% 0.0% 15.8% HEAD NURSE 97 20.6% 45.4% 22.7% 4.1% 7.2% 0.0% 0.0% STAFF NURSE 605 32.7% 41.8% 17.0% 4.1% 4.0% 0.0% 0.3% 8.8.8 240 353 174 46 64 11

Chi-square=175.2, df=20, p<.01

There is a significant relationship between type of position held and current enrollment of nurses in HSA 8 with the pattern varying from the State pattern in few areas. Administrators do account for a larger percentage of nurses enrolled in non-nursing doctoral programs in HSA 8 than in Illinois. Consultants and instructors account for an increased proportion of the nurses enrolled in associate degree programs while accounting for a smaller percentage of those enrolled in nursing master's programs. There are no nurses in HSA 8 enrolled in nursing doctoral programs nor are there any head nurses enrolled in non-nursing doctoral programs.

TABLE 40. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND CURRENT ENROLLMENT

| | FOR ILLINOI | S NURSES | IN HSA | 9 | | | | | |
|--------------|-------------|----------|----------------------------|-------|-------|-------|-------|-------|--|
| TYPE | SAMPLE | | CURRENT ENROLLMENT PROGRAM | | | | | | |
| OF | SIZE | ADN | NURSE | OTHER | NURSE | OTHER | NURSE | OTHER | |
| POSITION | | | BACC | BACC | MAST | MAST | DOCT | DOCT | |
| ADMINISTRATO | OR 56 | 5.4% | 26.8% | 32.1% | 14.3% | 14.3% | 3.6% | 3.6% | |
| CONSULTANT | 7 | 0.0% | 28.6% | 28.6% | 42.9% | 0.0위 | 0.0% | 0.0% | |
| INSTRUCTOR | 39 | 0.0% | 23.1% | 7.7% | 28.2% | 7.7% | 5.1% | 28.2% | |
| HEAD NURSE | 47 | 19.1% | 48.9% | 21.3% | 6.4% | 4.3% | 0.0% | 0.0% | |
| STAFF NURSE | 193 | 38.3% | 40.4% | 13.0% | 5.2% | 3.1% | 0.0% | 0.0% | |
| TOTAL | 342 | 86 | 127 | 58 | 35 | 19 | 4 | 0 13 | |

Chi-square=170.9, df=24, p<.01

There is a significant relationship between type of position held and current enrollment for nurses in HSA 9. Consultants in HSA 9 account for none of the enrollment in associate degree, non-nursing master's or any doctoral

programs, while accounting for a larger proportion of those nurses enrolled in nursing master's degree programs than is found in Illinois at large. Instructors in HSA 9 account for none of nurses enrolled in associate degree programs and an increased percentage of those enrolled in non-nursing doctoral programs than in Illinois overall. There are no head or staff nurses enrolled in doctoral programs in HSA 9. Administrators in HSA 9 are more likely to be enrolled in non-nursing baccalaureate programs than the corresponding group for Illinois.

TABLE 41. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND CURRENT ENROLLMENT

| <u></u> | OR ILLING | DIS NURSES | IN HSA | 10 | | | | | |
|--------------|-----------|------------|----------------------------|-------|-------|-------|-------|-------|--|
| TYPE | SAMPLE | | CURRENT ENROLLMENT PROGRAM | | | | | | |
| OF | SIZE | ADN | NURSE | OTHER | NURSE | OTHER | NURSE | OTHER | |
| POSITION | | | BACC | BACC | MAST | MAST | DOCT | DOCT | |
| ADMINISTRATO | R 38 | 7.9% | 52.6% | 13.2% | 15.8% | 7.0% | 0.0% | 2.6% | |
| CONSULTANT | 4 | 0.0% | 50.0% | 25.0% | 25.0% | 0.0% | 0.0% | 0.0% | |
| INSTRUCTOR | 19 | 5.3% | 15.8% | 10.5% | 47.4% | 0.0% | 0.0% | 21.1% | |
| HEAD NURSE | 30 | 23.3% | 56.7% | 10.0% | 0.0% | 10.0% | 0.0% | 0.0% | |
| STAFF NURSE | 142 | 47.9% | 40.8% | 9.2% | 0.0% | 1.4% | 0.7% | 0.0% | |
| TOTAL | 233 | 79 | 100 | 24 | 16 | 88 | 1 | 5 | |

Chi-square=137.7, df=24, p<.01

There is a significant relationship between type of position held and current enrollment for nurses in HSA 10. The only nursing doctoral student is a staff nurse with the non-nursing doctoral students being primarily instructors. When compared with Illinois, the enrollment of staff nurses in associate degree programs is increased as is the enrollment of administrators, consultants and head nurses in nursing baccalaureate programs. While there are no head or staff nurses enrolled in nursing master's programs, instructors account for a larger percentage of nurses enrolled in nursing master's programs.

TABLE 42. RELATIONSHIP BETWEEN TYPE OF POSITION HELD AND CURRENT ENROLLMENT

FOR ILLINOIS NURSES IN HSA 11 TYPE SAMPLE CURRENT ENROLLMENT PROGRAM OF SIZE ADN NURSE OTHER NURSE OTHER NURSE OTHER POSITION BACC BACC MAST MAST DOCT DOCT ADMINISTRATOR 67 16.4% 35.8% 14.9% 13.4% 16.4% 0.0% 3.0% CONSULTANT 9 11.1% 44.4% 33.3% 0.0% 11.1% 0.0% 0.0% INSTRUCTOR 36 5.6% 19.4% 5.6% 36.1% 5.6% 0.0% 27.8% HEAD NURSE 41 31.7% 43.9% 14.6% 9.8% 0.0% 0.0% 0.0% STAFF NURSE 42.0% 293 44.0% 8.9% 3.1% 2.0% 0.0% 0.0왕 446 150 182 47 35 20 12

Chi-square=205.2, df=20, p<.01

There is a significant relationship between type of position held and current enrollment of nurses in HSA 11. Head and staff nurses in HSA 11 account for a larger proportion of the nurses enrolled in associate degree programs than is found in Illinois at large. Consultants account for more of the nurses enrolled in baccalaureate programs in HSA 11 while none are enrolled in nursing master's programs. The percentage of instructors accounting for the nurses enrolled in non-nursing doctoral programs is greater for HSA 11 than Illinois although there are no nurses in any of the positions enrolled in nursing doctoral programs.

Practice Area

The data was also analysed so determine if a relationship existed between a nurse's major clinical or teaching practice area and the education of the nurse. Table 43 illustrates the relationship between the practice area and the nurses' basic nursing education.

TABLE 43. RELATIONSHIP BETWEEN AREA OF PRACTICE AND BASIC NURSING EDUCATION OF

| AREA | SAMPLE | | BASIC | NURSING EDUCATION |
|-------------|--------|---------|-----------|-------------------|
| OF | SIZE | DIPLOMA | ASSOCIATE | BACCALAUREATE |
| PRACTICE | | V-10-11 | DEGREE | DEGREE |
| GERIATRICS | 5766 | 66.3% | 16.7% | 17.0% |
| OB/GYN | 5092 | 58.3% | 19.8% | 21.9% |
| MED/SURG | 17435 | 48.9% | 23.6% | 27.4% |
| PEDIATRICS | 5143 | 48.8% | 16.5% | 34.9% |
| PSYCHIATRIC | 2688 | 51.1% | 21.3% | 27.6% |
| GENERAL | 2372 | 66.6% | 15.2% | 18.2% |
| TOTAL | 38496 | 20774 | 7880 | 9842 |

Chi-square=1009.3, df=10, p<.01

There is a significant relationship between the major clinical practice area and basic nursing education for Illinois Registered Nurses with the majority οf nurses practicing in the areas geriatric, obstectrics/gynecology, psychiatric, pediatric, and general nursing having as their basic nursing education a diploma program. Pediatric, psychiatric and medical/surgical nurses are most frequently graduates of baccalaureate nursing programs for their basic nursing education. Nurses whose basic nursing education was an associate degree program account for the lowest percentage of nurses in all practice areas, their greatest percentage being in medical/surgical and psychiatric nursing. The percentage of nurses with a basic nursing education of a baccalaureate degree are employed as pediatric, psychiatric and medical/surgical nurses.

Of the nurses whose basic nursing education is a diploma, the largest percentage are employed in medical/surgical nursing, 41.1% with 18.4% employed in geriatric nursing as the next most frequent area of practice. Nurses whose basic nursing education is an associate degree are most frequently employed in medical/surgical nursing, 52.3% with obstetrics/gynecologic and geriatric nursing next at 12.8% and 12.2% respectively. The most frequent area of practice for nurses whose basic nursing education is a baccalaureate degree is medical/surgical nursing, 48.6% with pediatric nursing second, 18.2%.

There is not a significant relationship at a .01 level of significance between area of practice and basic nursing education for nurses in HSAs 5, 9 and 10. The relationship is significant in the remainder of the Health Service

Areas. Variations from the statewide pattern for this relationship were primarily in there being an increased percentage of diploma prepared nurses constituting all or most of the practice areas with a corresponding decrease in the proportion comprised of baccalaureate prepared nurses. In HSAs 5,8 and 11 the increase was in nurses whose basic nursing education was an associate degree. In HSA 6/7 the variation from the statewide pattern was minimal with a slight decrease in the percentage of diploma nurses accounting for those employed in each of the practice areas and a corresponding slight increase in the baccalaureate for all practice areas.

Table 44 depicts the relationship between area of practice and the highest degree held by nurses in Illinois.

TABLE 44. RELATIONSHIP BETWEEN AREA OF PRACTICE AND HIGHEST DEGREE HELD BY

| | REGISTERED | NURSES | IN ILLINO | IS | | | | | | | |
|-------------|--------------|--------|---------------------|-------|-------|-------|-------|------|--|--|--|
| AREA | SAMPLE | | HIGHEST DEGREE HELD | | | | | | | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ | | | |
| PRACTICE | | | | BACC | BACC | MAST | MAST | EDD | | | |
| GERIATRIC | 57 77 | 56.2% | 14.5% | 16.9% | 7.3% | 2.8% | 1.9% | 0.4% | | | |
| OB/GYN | 5009 | 50.5% | 17.4% | 21.5% | 5.5% | 4.0% | 1.0% | 0.2% | | | |
| MED/SURG | 17469 | 38.9% | 20.8% | 26.8% | 5.3% | 6.2% | 1.7% | 0.4% | | | |
| PEDIATRICS | 5144 | 37.4% | 13.7% | 31.4% | 6.6% | 7.8% | 2.5% | 0.5% | | | |
| PSYCHIATRIC | 2695 | 34.2% | 16.0% | 18.1% | 11.8% | 13.1% | 5.2% | 1.6% | | | |
| GENERAL | 2377 | 54.1% | 13.1% | 19.9% | 7.2% | 2.8% | 2.6% | 0.3% | | | |
| TOTAL | 38561 | 16750 | 6803 | 9325 | 2460 | 2257 | 780 | 186 | | | |

Chi-square=1952.0, df=30, p<.01

There is a significant relationship between the major clinical or teaching practice area and the highest degree held by nurses in Illinois. While the majority of those employed in geriatric, obstetric/gynecologic and general nursing hold no degree, the percentages of medical/surgical and pediatric nurses with baccalaureate degrees in nursing are greater than in the other areas. Nurses with advanced degrees account for greater percentages of the psychiatric nurses than any other practice area.

More than half of the associate degree nurses are employed in medical/surgical nursing, 53.3%, as are nurses with nursing baccalaureate degrees, 50.2% The second most frequent area of practice for the nurses whose highest degree is an associate degree is gynecological/obstetric nursing, 13.0% followed by geriatric nursing, 12.3%. For nurses with a highest degree of a

nursing baccalaureate the second most frequently identified practice area is pediatric nursing, 17.3%. Nurses with a highest degree of a non-nursing baccalaureate are also most frequently employed in the area of medical/surgical nursing, 37.8% with a somewhat even division between geriatric, pediatric, psychicatric and obstetric/gynecologic accounting for the majority of the remainder, 17.2%, 13.8%, 12.9% and 11.3% respectively. While 47.6% of the nurses whose highest degree is a nursing master's degree are employed in medical/surgical nursing, there are 17.8% in pediatric nursing and 15.6% in psychiatric nursing. Nurses with non-nursing master's degrees as the highest degree are likewise most frequently employed in medical/surgical nursing, 37.1% with the majority of the remainder employed in psychiatric nursing, 17.9%, pediatric nursing, 16.7% or geriatric nursing, 14.1%. A similar pattern follows for n rses with doctorate degrees, 38.2% in medical/surgical nursing, 22.6% in psychiatric nursing, 15.1% pediatric nursing and 13.4% geriatric For those nurses with no degree, 40.6% are employed in medical/surgical nursing with 19.4% in geriatric nursing and 15.4% in obstetric/gynecologic nursing.

Tables 45-54 provide the information regarding the area of practice and highest degree held by nurses in each of the HSAs in Illinois. The relationship between major clinical or teaching area and highest degree held by the nurses was significant in all of the Health Service Areas except HSA 10. TABLE 45. RELATIONSHIP BETWEEN AREA OF PRACTICE AND HIGHEST DEGREE HELD BY

| | REGISTERED | NURSES | IN ILLINC | IS HSA | 1 | | | |
|-------------|------------|--------|-----------|--------|-----------|--------|-------|------|
| AREA | SAMPLE | | | HIGH | EST DEGRE | E HELD | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| PRACTICE | | | | BACC | BACC | MAST | MAST | EDD |
| GERIATRIC | 339 | 67.6% | 16.8% | 10.0% | 3.5% | 0.9% | 0.9% | 0.3% |
| OB/GYN | 214 | 56.1% | 22.0% | 12.6% | 4.2% | 4.2% | 0.9% | 0.0% |
| MED/SURG | 607 | 48.1% | 26.5% | 14.5% | 2.6% | 6.4% | 6.8% | 1.0% |
| PEDIATRICS | 185 | 51.9% | 18.4% | 13.5% | 5.9% | 8.1% | 2.2% | 0.0% |
| PSYCHIATRIC | 99 | 43.4% | 16.2% | 10.1% | 12.1% | 11.1% | 4.0% | 3.0% |
| GENERAL | 164 | 68.9% | 14.0% | 11.6% | 3.7% | 0.6% | 1.2% | 0.0% |
| TOTAL | 1608 | 893 | 338 | 203 | 66 | 78 | 20 | 10 |

Chi-square=121.1, df=30, p<.01

In HSA 1 the majority of nurses in all clinical practice areas except medical/surgical and psychiatric hold no degree and in both of those practice

areas do account for the largest proportion of nurses with slightly less than half. The pattern for employment of nurses by practice area as related to highest degree held varies from that for Illinois at large in that there is a greater percentage of the nurses in all practice areas who hold no degree and a smaller percentage in all practice areas with a nursing baccalaureate as the highest degree.

Half of the nurses in HSA 1 with a nursing master's degree practice or teach in the area of medical/surgical nursing and more than half of those with doctorates identify medical/surgical nursing as their area of practice, 60.0%. While medical/surgical nursing is the practice area for the greatest percentage of nurses in all of the educational groups, it is least often the practice area for nurses whose highest degree is a non-nursing baccalaureate or master's degree, 24.2% and 25.0% respectively. Nurses in HSA 1 with no degree are the most likely to be employed in geriataric nursing, 25.6% of them employed in the area. Twenty percent of the nurses in HSA 1 with a highest degree of a non-nursing master's degree practice in the areas of pediatric and psychiatric nursing each. Nurses with non-nursing baccalaureate degrees are practicing tend to be practicing generally equally in all areas except general practice with 18.2% in geriatric and psychiatric nursing, 16.7% in pediatric nursing and 13.6% in obstetric/gynecologic nursing.

TABLE 46. RELATIONSHIP BETWEEN AREA OF PRACTICE AND HIGHEST DEGREE HELD BY

| | REGISTERED | NURSES | IN ILLINO | IS HSA 2 | | | | |
|-------------|------------|--------|-----------|----------|----------|-------|-------|------|
| AREA | SAMPLE | | | HIGHEST | DEGREE 1 | HELD | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| PRACTICE | | | | BACC | BACC | MAST | MAST | EDD |
| GERIATRIC | 325 | 67.1% | 15.7% | 7.7% | 6.2% | 3.1% | 0.3% | 0.0% |
| OB/GYN | 283 | 63.3% | 19.8% | 9.2% | 3.9% | 3.2% | 0.7% | 0.0왕 |
| MED/SURG | 839 | 48.3% | 26.6% | 12.9% | 5.4% | 4.6% | 1.9% | 0.4% |
| PEDIATRICS | 270 | 55.6% | 19.6% | 16.3% | 3.3% | 4.1% | 1.1% | 0.0% |
| PSYCHIATRIC | 131 | 44.3% | 21.4.% | 9.9% | 6.9% | 7.6% | 9.9% | 0.0% |
| GENERAL | 161 | 68.9% | 14.9% | 9.3% | 3.7% | 1.9% | 0.6% | 0.6% |
| TOTAL | 2009 | 1121 | 435 | 231 | 100 | 82 | 36 | 44 |

Chi-square=132.5, df=30, p<.01

The majority of nurses in HSA 2 in all practice areas except medical/surgical and psychiatric nursing hold no degree where the same group account for the greatest percentage of nurses practicing in the two areas.

Nurses with associate degrees account for the second greatest proportion of medical/surgical and psychiatric nurses in HSA 1. As in HSA 1, the primary variation in HSA 2 from the statewide pattern relative to major clinical practice or teaching area and highest degree held is a decrease in nurses with baccalaureate degrees in nursing in all practice areas and a corresponding increase of nurses with no degree in all of the practice areas.

Nurses in all educational categories in HSA 2 are most frequently employed in medical/surgical nursing, with more than half of those with associate degrees, 51.3%, and doctorates, 75.0%, identifying this as their practice area. Nurses with non-nursing baccalaureate degrees, 20.0%, and those with no degree, 19.4%, are most frequently employed in geriatric nursing. Of the nurses in HSA 2 with non-nursing master's degrees, 36.1% are practicing in the area of psychiatric nursin; with 12.2% of those with nursing master's degrees practicing psychiatric nursing.

TABLE 47. RELATIONSHIP BETWEEN AREA OF PRACTICE AND HIGHEST DEGREE HELD BY

| | REGISTERED | NURSES | IN ILLINO | IS HSA 3 | | | · | |
|-------------|------------|--------|-----------|----------|-----------|-------|-------|------|
| AREA | SAMPLE | | | HIGHE | ST DEGREE | HELD | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| PRACTICE | | | | BACC | BACC | MAST | MAST | EDD |
| GERIATRIC | 284 | 73.6% | 8.5% | 8.8% | 4.9% | 0.7% | 3.5% | 0.0% |
| OB/GYN | 205 | 61.5% | 21.0% | 9.8% | 5.9% | 0.5% | 1.5% | 0.0% |
| MED/SURG | 689 | 56.3% | 20.5% | 13.5% | 5.2% | 2.9% | 1.5% | 0.1% |
| PEDIATRICS | 178 | 58.4% | 16.3% | 10.1% | 9.6% | 2.2% | 2.2% | 1.1% |
| PSYCHIATRIC | 95 | 53.7% | 14.7% | 12.6% | 10.5% | 4.2% | 3.2% | 1.1% |
| GENERAL | 117 | 66.7% | 16.2% | 10.3% | 6.0% | 0.0% | 0.9% | 0.0% |
| TOTAL | 1568 | 956 | 270 | 180 | 96 | 31 | 31 | 4 |

Chi-square=71.9, df=30, p<.01

Nurses with no degree account for more than half of the nurses employed in all practice area in HSA 3 without exception. In addition to the higher percentage of nurses with no degree in all practice areas in HSA 3 than in Illinois at large and the corresponding decrease in nurses with nursing baccalaureate degrees in all practice areas, there is one further variation from the statewide pattern. The percentage of nurses with a highest degree of a nursing master's degree in HSA 3 is about one-third that for the State.

In HSA 3 more than half of the nurses with an associate degree, nursing baccalaureate and nursing master's degree are practicing medicaal/surgical

nursing, 52.2%, 51.7% and 64.5% respectively. While 40.6% of the nurses in HSA 3 with no degree are practicing medical/surgical nursing, 21.9% of this groups are employed in geriatric nursing, 13.2% in obstetric/gynecologic nursing and 1019% in pediatric nursing. Nurses with non-nursing baccalaureate degrees are most frequently employed in medical/surgical nursing, 37.5%, with the others distributed relatively evenly in all areas except general nursing, 17.7% in pediatrics, 14.6% in geriatrics, 12.5% in obstetrics/gynecology and 10.4% in psychiatric nursing. Of the nurses with non-nursing master's degrees, 32.3% are employed in the practice of geriatric and medical/surgical nursing with 12.9% in pediatrics and 9.7% in obstetrics/gynecology and psychiatric nursing each.

TABLE 48. RELATIONSHIP BETWEEN AREA OF PRACTICE AND HIGHEST DEGREE HELD BY

| | REGISTERED | NURSES | IN ILLINC | IS 'SA 4 | | | | |
|-------------|------------|--------|-----------|----------|-----------|-----------|-------|------|
| AREA | SAMPLE | | | | HIGHEST D | EGREE HEI | JD | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| PRACTICE | | | | BACC | BACC | MAST | MAST | EDD |
| GERIATRIC | 396 | 62.9% | 14.1% | 12.4% | 5.3% | 1.8% | 3.0% | 0.5% |
| OB/GYN | 239 | 59.8% | 18.0% | 13.4% | 6.3% | 1.7% | 0.8% | 0.0% |
| MED/SURG | 782 | 51.2% | 19.6% | 19.8% | 4.2% | 3.5% | 1.7% | 0.1% |
| PEDIATRICS | 216 | 51.9% | 10.6% | 20.4% | 6.5% | 6.0% | 4.6% | 0.0% |
| PSYCHIATRIC | 128 | 46.9% | 13.3% | 12.5% | 10.9% | 10.9% | 5.5% | 0.0% |
| GENERAL | 174 | 60.3% | 13.2% | 12.6% | 9.8% | 0.6% | 2.9% | 0.6% |
| TOTAL | 1935 | 1069 | 315 | 318_ | 114 | 66 | 49 | 4 |

Chi-square=105.5, df=30, p<.01

Nurses with no degree account for more than half of the nurses in HSA 4 employed in all of the practice areas except psychiatric where they account for slightly less than half. As in each of the preceding HSAs, the major variation from the statewide pattern for major clinical teaching or practice area is in the increased percentage of nruses with no degree constituting for the nurses in all practice areas and the decreased percentage of nurses with nursing baccalaureate degrees in all areas.

In HSA 4, 48.6% of the nurses with associate degrees, 48.7% of those with nursing baccalaureate degrees and 40.9% of those with nursing master's degrees are employed in medical/surgical nursing while 37.4% of those with no degree, 28.9% of those with nursing baccalaureates and 26.5% of those with non-nursing master's degrees are employed in the same practice area. Of the nurses with no

degree, 23.3% are employed in geriatric nursing, 13.4% in obstetrics/gynecology and 10.5% in pediatrics. Nurses with non-nursing baccalaureate degrees are divided among geriatric nursing, general practice, obstetric nursing, pediatrics and psychiatric nursing relatively evenly, 18.4%, 14.9%, 13.2% and 12.3% for the last two areas. While 24.5% of the nurses in HSA 4 with non-nursing master's degrees are employed in geriatric nursing, 20.4% of them are in pediatrics as are 19.7% of those nurses with nursing master's degrees. Both nurses with a highest degree of an associate degree and a nursing baccalaureate identify geriatric nursing as their second most frequent practice area, 17.8% and 15.4% respectively.

TABLE 49. RELATIONSHIP BETWEEN AREA OF PRACTICE AND HIGHEST DEGREE HELD BY

| | REGISTERED | NURSES | IN ILLINC | DIS HSA 5 | | | <u></u> | |
|-------------|------------|--------|-----------|-----------|-----------|-------|---------|------|
| AREA | SAMPLE | | | HIGHE | ST DE REE | HELD | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| PRACTICE | | | | BACC | BACC | MAST | MAST | EDD_ |
| GERIATRIC | 240 | 45.0% | 33.8% | 11.3% | 7.9% | 0.8% | 1.3% | 0.0% |
| OB/GYN | 152 | 42.1% | 41.4% | 11.8% | 2.0% | 2.0% | 0.7% | 0.0% |
| MED/SURG | 621 | 32.7% | 44.3% | 12.9% | 5.3% | 4.2% | 0.5% | 0.2% |
| PEDIATRICS | 72 | 27.8% | 34.7% | 16.7% | 11.1% | 6.98 | 2.8% | 0.0% |
| PSYCHIATRIC | 64 | 34.4% | 28.1% | 12.5% | 7.8% | 7.8% | 7.8% | 1.6% |
| GENERAL | 127 | 44.9% | 29.1% | 15.7% | 8.7% | 0.0% | 0.8% | 0.88 |
| TOTAL | 1276 | 474 | 499 | 165 | 79 | 41 | 15 | 3_ |

Chi-square=91.3, df=30, p<.01

While no category of nurses in HSA 5 account for half of the nurses in any practice area, nurses with no degree account for the largest percentage of nurses practicing in geriatrics, obstetrics/gynecology, psychiatric and general nursing. Nurses with an associate degree account for the greatest proportion of medical/surgical and pediatric nurses in HSA 5. The pattern of major clinical practice or teaching area as related to highest degree held by nurses in HSA 5 varies from the statewide pattern and that of the previous four HSAs in that there is a lower percentage of nurses with no degree comprising all of the practice areas with the exception of psychiatric nursing which is even with the statewide pattern. In addition, there is a corresponding increase in the percentage of nurses in all areas of practice accounted for by nurses whose highest degree is an associate degree. As in the previous HSAs, there is a smaller proportion of the nurses in all categories of practice whose highest

degree is a nursing baccalaureate.

As in other HSAs, nurses in HSA 5 with no degree, an associate degree, a nursing baccalaureate degree, a non-nursing baccalaureate or nursing master's degree are most frequently employed in medical/surgical nursing as their major clinical practice or teaching area, 42.8%, 55.1%, 48.5%, 41.8% and 63.4% respectively. For all of these except those with a nursing master's degree, the second most frequent practice area is geriatrics with 22.8% of those with no degree, 16.2% of those with an associate degree, 16.4% of the with nursing baccalaureates and 24.1% of those with non-nursing baccalauretes identifying geriatrics as their major clinical practice or teaching area. While one-third of the nurses in HSA 5 with a non-nursing master's degree practice in psychiatric nursing, 20.0% practice in geriatrics and medical/surgical nursing each.

TABLE 50. RELATIONSHIP BETWEEN AREA OF PRACTICE AND HIGHEST DEGREE HELD BY

| | REGISTERED | NURSES | IN ILLINC | IS HSA 6 | /7 | | | | | |
|-------------|------------|--------|---------------------|----------|-------|-------|-------|------|--|--|
| AREA | SAMPLE | | HIGHEST DEGREE HELD | | | | | | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ | | |
| PRACTICE | | | | BACC | BACC | MAST | MAST | EDD | | |
| GERIATRIC | 2130 | 49.6% | 12.7% | 23.9% | 7.6% | 3.9% | 1.7% | 0.6% | | |
| OB/GYN | 2306 | 45.3% | 14.3% | 28.4% | 6.2% | 4.5% | 0.9% | 0.4% | | |
| MED/SURG | 8138 | 33.7% | 17.8% | 33.7% | 5.9% | 6.9% | 1.6% | 0.3% | | |
| PEDIATRICS | 2632 | 31.6% | 12.5% | 37.4% | 7.1% | 8.3% | 2.4% | 0.7% | | |
| PSYCHIATRIC | 1177 | 27.3% | 15.0% | 21.5% | 13.9% | 16.3% | 4.7% | 1.3% | | |
| GENERAL | 852 | 46.8% | 11.3% | 25.7% | 7.3% | 4.5% | 4.1% | 0.4% | | |
| TOTAL | 17235 | 6399 | 2653 | 5358 | 1203 | 1196 | 340 | 8.6 | | |

Chi-square=846.5, df=30, p<.01

While there is no educational group in HSA 6/7 which accounts for half of the nurses in any practice area, nurses with no degree account for the largest percentage of the geriatric, obstetric/gynecologic, psychiatric and general nurses with a tie between those with no degree and a nursing baccalaureate degree in medical/surgical nursing. Nurses with a baccalaureate degree in nursing account for the greatest percentage of the nurses in HSA 6/7 employed in pediatric nursing. Variations from the statewide pattern for major clinical practice or teaching area are found in the decreased proportion of nurses in all practice areas with no degree or an associate degree and the corresponding increase of nurses in all practice areas with nursing baccalaureate degrees.

In HSA 6/7 over slightly more than half of the nurses with an associate degree or a nursing baccalaureate degree are employed in medical/surgical nursing as their major clinical practice or teaching area. For the nurses with an associate degree, the next most frequently identified areas are obstetrics/gynecology and pediatrics with 12.4% in each. The second most frequent practice area for nurses in HSA 6/7 with a nursing baccalaureate degree is pediatrics, 18.4%. While 40.2% of the nurses in HSA 6/7 with a non-nursing baccalaureate degree are medical/surgical nurses, 15.5% practice in pediatrics, 13.6% in psychiatric, 13.5% in geriatrics and 12.0% in obstetrics/gynecology. Nurses with a master's degree in nursing are most frequently have as their most frequent area of practice medical/surgical nursing, 46.9%, with 18.2% in pediatrics and 16.1% in psychiatric nursing. distribution of nurses with non-nursing master's degree is similar, 38.2% practicing in medical/surgical nursing, 18.5% in pediatrics, 16.2% in psychiatric nursing and 10.6% in geriatrics.

TABLE 51. RELATIONSHIP BETWEEN AREA OF PRACTICE AND HIGHEST DEGREE HELD BY

| | REGISTERED | NURSES | IN ILLING | DIS HSA 8 | | | | |
|-------------|------------|--------|-----------|-----------|-----------|-------|-------|------|
| AREA | SAMPLE | | *** | HIGHE | ST DEGREE | HELD | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| PRACTICE | | | | BACC | BACC | MAST | MAST | EDD |
| | | | | | | | | |
| GERIATRIC | 468 | 56.2% | 18.2% | 14.3% | 7.7% | 1.9% | 1.7% | 0.0% |
| OB/GYN | 350 | 53.7% | 24.0% | 12,9% | 5.1% | 4.0% | 0.3% | 0.0% |
| MED/SURG | 1025 | 39.2% | 28.4% | 19.9% | 6.0% | 4.4% | 2.0% | 0.1% |
| PEDIATRICS | 261 | 42.9% | 18.0% | 23.0% | 8.8% | 4.6% | 2.3% | 0.4% |
| PSYCHIATRIC | 221 | 38.5% | 20.4% | 13.6% | 13.6% | 8.1% | 5.4% | 0.5% |
| GENERAL | 188 | 53.2% | 11.2% | 21.8% | 11.2% | 2.7% | 0.0% | 0.0% |
| TOTAL | 2513 | 1150 | 573 | 447 | 190 | 103 | 47 | 3_ |

Chi-square=146.4, df=30, p<.01

Somewhat more than half of the nurses practicing in geriatrics, obstetric/gynecology and general nursing in HSA 8 hold no degree while the same group accounts for the greatest percentage of all major clinical practice or teaching areas. The pattern for clinical practice area with respect to highest degree held for nurses in HSA 8 varies little from the statewide pattern. There is a slight decrease in the proportion of associate degree nurses in all practice areas with a corresponding increase in the proportion of nurses in

each with nursing baccalaureate degrees.

Approximately one-half of the nurses in HSA 8 with an associate degree as the highest degree held are employed in medical/surgical nursing with 14.8% in geriatrics and 14.7% in obstetrics/gynecology. While 35.0% of the nurse with no degree practice medical/surgical nursing, 22.9% practice geriatric nursing and 16.3% obstetrics/gynecology. Of the nurses in HSA 8 with nursing baccalaureate degrees, 45.6% practice in the area of medical/surgical nursing, 15.0% geriatrics and 13.4% pediatrics. Nurses with non-nursing baccalaureate degrees are divided with 32.6% medical/surgical, 18.9% geriatric, 15.8% psychiatric and 12.1% pediatric nurses. As in previous HSAs, nurses with master's degrees in HSA 8 are most frequently employed in medical/surgical nursing, 43.7% of those with nursing master's degrees and 42.6% with non-nursing master's degrees. In both instances the second most frequent area of practice is psychiatric nursing, 25.5% of those with non-nursing master's and 17.5% of those with nursing master's degrees practicing psychiatric nursing.

TABLE 52. RELATIONSHIP BETWEEN AREA OF PRACTICE AND HIGHEST DEGREE HELD BY

| | REGISTERED | NURSES : | IN ILLINO | IS HSA 9 | | | | | |
|-------------|------------|----------|---------------------|----------|-------|-------|-------|------|--|
| AREA | SAMPLE | | HIGHEST DEGREE HELD | | | | | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ | |
| PRACTICE | | | | BACC | BACC_ | MAST | MAST | EDD_ | |
| GERIATRIC | 201 | 51.7% | 18.4% | 14.9% | 10.9% | 2.0% | 2.0% | 0.0% | |
| OB/GYN | 134 | 59.7% | 20.9% | 13.4% | 3.7% | 1.5% | 0.7% | 0.0% | |
| MED/SURG | 450 | 48.4% | 24.7% | 14.0% | 5.3% | 5.8% | 1.3% | 0.4% | |
| PEDIATRICS | 117 | 40.2% | 22.2% | 23.1% | 5.1% | 8.5% | 0.0% | 0.9% | |
| PSYCHIATRIC | 91 | 41.8% | 22.0% | 15.4% | 11.0% | 6.6% | 3.3% | 0.0% | |
| GENERAL | 46 | 67.4% | 4.3% | 13.0% | 15.2% | 0.0% | 0.0% | 0.0% | |
| TOTAL | 1039 | 518 | 224 | 158 | 7.4 | 4.8 | 14 | 3_ | |

Chi-square=62.0, df=30, p<.01

Nurses with no degree account for the majority of geriatric, obstetric/gynecologic and general nurses in HSA 9 and the greatest percentage of nurses in all of the clinical practice areas constituting more than 40% of the nurses in each practice area. When compared with Illinois data for the relationship between major clinical practice or teaching area and highest degree held, the two variations of increased percentage of nurses with no degrees and decreased nurses with nursing baccalaureate degrees in all practice

areas is noted in HSA 9. In addition there is a decreased proportion of nurses whose highest degree is a nursing master's who constitute the psychiatric nurses in HSA 9 than in Illinois overall.

The greatest percentage of nurses in all educational groups are employed in medical/surgical nursing in HSA 9 with 54.2% of the nurses with a highest degree of a nursing master's being employed in medical/surgical nursing. three major clinical practice areas for nurses with no degree are medical/surgical, 42.1%, geriatrics, 20.1% and obstetrics/gynecology, 15.4%. Likewise, nurses whose highest degree is an associate degree are most frequently medical/surgical nurses, 49.6%, with 16.5% in geriatrics, 12.5% in obstetrics/gynecology and 11.6% in pediatrics. While nurses in HSA 9 whose highest degree is a nursing baccalaureate are most frequently employed in medical/surgical nursing, 39.9%, 19.0% practice geriatric nursing and 17.1% pediatric nursing. Nurses with non-nursing baccalaureate degrees as their highest degree are divided primarily between medical/surgical nursing, 32.4%, and geriatric nursing, 29.7% with psychiatric nursing next, 13.5%. Approximately one-fifth, 20.8%, of the nurses in HSA 9 whose highest degree is a master's degree in nursing practice pediatric nursing with 12.5% practicing WIth 42.9% of the nurses in HSA 9 with non-nursing psychiatric nursing. master's degrees as their highest degree, 28.6% identify their practice area as geriatric nursing and 21.4% as psychiatric.

TABLE 53. RELATIONSHIP BETWEEN AREA OF PRACTICE AND HIGHEST DEGREE HELD BY

| | REGISTERED | NURSES | IN ILLINC | SIS HSA 10 |) | | | |
|-------------|------------|--------|-----------|------------|----------|-------|-------|------|
| AREA | SAMPLE | | | HIGHES | T DEGREE | HELD | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| PRACTICE | | | | BACC | BACC | MAST | MAST | EDD |
| GERIATRIC | 86 | 70.9% | 18.6% | 8.1% | 2.3% | 0.0% | 0.0% | 0.0% |
| OB/GYN | 96 | 71.9% | 16.7% | 10.4% | 1.0% | 0.0% | 0.0% | 0.0% |
| MED/SURG | 340 | 58.5% | 18.5% | 12.4% | 2.4% | 6.8% | 1.2% | 0.3% |
| PEDIATRICS | 78 | 57.7% | 10.3% | 19.2% | 3.8% | 5.1% | 3.8% | 0.0% |
| PSYCHIATRIC | 36 | 52.8% | 19.4% | 13.9% | 2.8% | 11.1% | 0.0% | 0.0% |
| GENERAL | 51 | 60.8% | 11.8% | 15.7% | 7.8% | 2.0% | 2.0% | 0.0% |
| TOTAL | 687 | 424 | 116 | 87 | 19 | 32 | 8 | 1 |

Chi-square=43.4, df=30, p>.01

While the relationship between major clinical practice or teaching area in HSA 10 is not significant, it is noted that there is a substantially larger

proportion of nurses with no degree and a smaller percentage with a nursing baccalaureate degree comprising all practice areas. The majority of nurses in all practice areas do hold no degree in HSA 10.

Of the nurses in HSA 10 with no degree, 46.9% practice medical/surgical nursing, 16.3% obstetric/gynecologic nursing and 14.4% geriatric nursing. pattern is similar for those nurses whose highest degree is an associate degree, 54.3% medical/surgical and 13.8% each in geriatric obstetric/gynecologic nursing. Nurses in HSA 10 with baccalaureate degrees while most frequently practicing medical/surgical nursing, 48.3%, indicate the practice of pediatric nursing as the second most frequent area, 17.2% followed by obstetric/gynecologic nursing, 11.5%. Medical/surgical and general nursing account for 63.2% of the nurses whose highest degrees are non-nursing baccalaureates. The practice area for 71.9% of the nurses in HSA 10 with nursing master's degrees as their highest degrees is medical/surgical with 12.5% practicing pediatric and psychiatric nursing each. While half of the nurses with non-nursing master's degrees have as a major clinical practice or teaching area medical/surgical nursing, 37.5% practice in pediatric nursing.

TABLE 54. RELATIONSHIP BETWEEN AREA OF PRACTICE AND HIGHEST DEGREE HELD BY

DECTORDED MID ON A ---

| | REGISTERED | NURSES | IN ILLINC | IS HSA 11 | | · · · · · · · · · · · · · · · · · · · | | | |
|-------------|------------|--------|---------------------|-----------|-------|---------------------------------------|-------|------|--|
| AREA | SAMPLE | | HIGHEST DEGREE HELD | | | | | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ | |
| PRACTICE | | | | BACC | BACC | MAST | MAST | EDD | |
| GERIATRIC | 166 | 57.8% | 17.5% | 12.0% | 9.0% | . 0.0% | 3.6% | 0.0왕 | |
| OB/GYN | 176 | 51.7% | 25.0% | 14.2% | 4.0% | 3.4% | 1.7% | 0.0% | |
| MED/SURG | 636 | 37.6% | 34.9% | 18.6% | 4.6% | 2.7% | 1.4% | 0.3% | |
| PEDIATRICS | 137 | 45.3% | 22.6% | 13.1% | 8.0% | 6.6% | 3.6% | 0.78 | |
| PSYCHIATRIC | 89 | 43.8% | 19.1% | 10.1% | 3.4% | 13.5% | 4.5% | 5.6% | |
| GENERAL | 65 | 47.7% | 23.1% | 21.5% | 6.2% | 0.0% | 1.5% | 0.0% | |
| TOTAL | 1269 | 558 | 358 | 204 | 69 | 44 | 28 | 8 | |

Chi-square=139.0, df=30, p<.01

In HSA 11 nurses with no degrees and associate degrees account for similar proportions of the nurses indicating medical/surgical nursing as their major clinical practice or teaching area with nurses holding no degree clearly constituting the greatest proportion of nurses in all practice areas. When compared with Illinois at large, the data for HSA 11 varies with a larger proportion of the pediatric and psychiatric nurses holding no degree and a

generally larger proportion of all practice areas being constituted of nurses whose highest degree is an associate degree with a corresponding decrease in the proportion of nurses with nursing baccalaureate degrees.

More than half nurses in HSA 11 whose highest degree is an associate or baccalaureate degree in nursing practice in the area of medical/surgical nursing, 62.0% and 57.8% respectively. Although less than half, the greatest percentage of nurses with no degree, 42.8%, non-nursing baccalaureate degrees, 42.0%, nursing master's degrees, 38.5% and non-nursing master's degrees, 32.1% practice in the area of medical/surgical nursing. Nurses with non-nursing baccalaureate and master's degrees are more likely than the other educational groups to practice geriatric nursing, 21.7% and 21.4% respectively. Of the nurses in HSA 11 with nursing master's degrees, 27.3% have as their major clinical or teaching area psychiatric nursing and 20.5% pediatrics.

Table 55 demonstrates the relationship between the major clinical practice or teaching area for nurses in Illinois and their current enrollment in educational programs.

TABLE 55. RELATIONSHIP BETWEEN PRACTICE AREA AND CURRENT ENROLLMENT BY

| | + 11111/010 | MORSES | | | | | | |
|-------------|------------------------|--------|-------|-------|----------------|-------|-------|-------|
| AREA | SAMPLE | | RAM | | | | | |
| OF | SIZE | ADN | NURSE | OTHER | NURSE | OTHER | NURSE | OTHER |
| PRACTICE | | | BACC | BACC | MAST | MAST | DOCT | DOCT |
| GERIATRIC | 1114 | 27.5% | 34.8% | 18.1% | 8.6% | 8.4% | 1.3% | 1.2% |
| OB/GYN | 1069 | 25.6% | 39.6% | 15.1% | 11.0 5 | 5.3% | 1.8% | 1.6% |
| MED/SURG | 4548 | 24.4% | 40.9% | 11.0% | 14.1% | 6.0% | 1.1% | 2.4% |
| PEDIATRICS | 1287 | 15.9% | 39.8% | 13.8% | 18.0% | 9.0% | 1.0% | 2.48 |
| PSYCHIATRIC | 800 | 17.8% | 27.1% | 19.6% | 15 .5 % | 11.5% | 1.9% | 6.6% |
| GENERAL | 494 | 24.1% | 33.8% | 20.9% | 10.3% | 9.1% | 0.4% | 1.4% |
| TOTAL | 9312 | 2157 | 3568 | 1302 | 1264 | 678 | 112 | 231 |
| | | | | | | | | |

Chi-square=348.5, df=30, p<.01

TLILINOIS NURSES

There is a significant relationship between the major clinical practice or teaching area and current enrollment in educational programs for Illinois Registered nurses. Nurses enrolled in associate degree and nursing baccalaureate programs account for at least half of the geriatric, obstetric/gynecologic, medical/surgical, pediatric and general practice nurses enrolled in educational programs. Psychiatric nurses are enrolled primarily in nursing baccalaureate programs with a fairly even distribution of the majority

of the remainder in associate degree, non-nursing baccalaureate and master's degree and nursing master's degree programs. Total enrollment in doctoral programs is 3.7% of those enrolled with the nurses most frequently enrolled in doctoral programs being psychiatric nurses.

The majority of those enrolled in associate degree, nursing baccalaureate and nursing master's programs are practicing in the area of medical/surgical nursing, 51.2%, 52.2% and 50.9% respectively. Medical/surgical nurses also account for 38.5% of the nurses enrolled in non-nursing baccalaureate programs, 40.4% of those in non-nursing master's degree programs, 47.6% of those in non-nursing doctoral programs and 42.9% of those in nursing doctoral programs. Geriatric nurses account for 14.2% of those enrolled in associate degree programs, 15.5% of those in non-nursing baccalaureate programs, 13.9% of those i. non-nursing master's degree programs and 13.4% of those in nursing doctoral programs. Seventeen percent (17%) of the nurses enrolled in nursing doctoral programs are practicing in the obstetric/gynecologic area with 13.9% practicing psychiatric nursing. Psychiatric nurses also account for 22.9% of the nurses enrolled in non-nursing doctoral programs.

When this data was broken down by Health Service Area, a number of empty cells resulted due to size of the respondent pool and the relationships in HSAs 1,2,4,5,9 and 10 were found to be non-significant. In several of the HSAs there did appear to be increased percentages of nurses from several practice areas enrolled in associate degree and nursing baccalaureate programs and decreasing percentages of nurses enrolled in graduate programs than the statewide data demonstrated. HSA 6/7 most closely parallelled the statewide pattern with nearly half of those nurses enrolled located in HSA 6/7.

Nursing Education Programs and Education

The final question to be answered by this survey is related to educational preparation of nurses practicing as nursing educators as related to the type of nursing education program in which they are teaching. Table 56 illustrates the relationship between the highest degree held and the type of nursing education program in which Illinois nurses are teaching.

TABLE 56. RELATIONSHIP BETWEEN TYPE NURSING EDUCATION PROGRAM IN WHICH

| | TEACHING Z | AND HIGHES | T DEGREE | OF REGIS | STERED N | JRSES IN | ILLINOIS | |
|-------------|------------|------------|----------|----------|-----------|----------|----------|-------|
| TYPE | SAMPLE | | | HIGH | EST DEGRI | EE HELD | | |
| OF | SIZE | NONE | ADN | NURSE | OTHER | NURSE | OTHER | PHD/ |
| PROGRAM | | | | BACC | BACC | MAST | MAST | EDD |
| PRACTICAL | 287 | 17.8% | 5.6% | 46.7% | 10.5% | 5.6% | 13.6% | 0.3% |
| DIPLOMA | 373 | 6.2% | 0.5% | 35.9% | 4.8% | 41.6% | 10.5% | 0.5% |
| ASSOCIATE | 495 | 4.4% | 2.2% | 21.8% | 1.2% | 62.2% | 7.3% | 0.8% |
| BACCALAUREA | re 510 | 0.6% | 0.4% | 6.7% | 0.8% | 82.7% | 3.1% | 5.7% |
| GRADUATE | 115 | 2.6% | 0.9% | 7.0% | 1.7% | 39.1% | 9.6% | 39.1% |
| TOTAL | 1780 | 102 | 32 | 418 | 60 | 946 | 141 | 81_ |

Chi-square=962.0, df=24, p<.01

There is a significant relationship between the type of nursing education program in which a nurse is teaching and the highest degree held by the nurse with 91.5% of the nurses teaching in baccalaureate programs having an advanced degree while 52.6% of those teaching in diploma programs, 70.3% of the associate degree educators hold advanced degrees. In contrast 19.5% of the practical nursing educators have advanced degrees and 87.8% of the graduate faculty have advanced degrees.

Of the doctorally prepared nursing educators, 55.6% teach in graduate programs and 35.8% in baccalaureate degree programs. One-half of the educators with no degrees, associate and non-nursing baccalaureate degrees are teaching in practical nursing programs. Nursing educators with nursing baccalaureate degree degrees are teaching primarily in practical, diploma and associate degree programs, 32.1% in the practical and diploma and 25.8% in associate degree programs. Of the nursing educators with nursing master's degrees, 44.6% are teaching in baccalaureate programs and 32.6% in associate degree programs with 16.4% in diploma. Nursing educators with non-nursing master's degrees are primarily teaching in practical nursing programs, 27.7%, diploma programs, 27.7% and associate degree programs, 25.5%.

The relationship between type of nursing education program in which a nurse is teaching and current educational enrollment is demonstrated in Table 57.

TABLE 57. RELATIONSHIP BETWEEN TYPE NURSING PROGRAM IN WHICH TEACHING AND

| CU | RRENT ENF | OLLMENT | OF ILLIN | OIS NURSE | s | | | |
|---------------|-----------|------------------------------|----------|-----------|-------|-------|-------|-------|
| TYPE | SAMPLE | E CURRENT ENROLLMENT PROGRAM | | | | | | |
| OF | SIZE | ADN | NURSE | OTHER | NURSE | OTHER | NURSE | OTHER |
| PROGRAM | | | BACC | BACC | MAST | MAST | DOCT | DOCT |
| PRACTICAL | 100 | 4.0% | 28.0% | 10.0% | 30.0% | 26.0% | 0.0% | 2.0% |
| DIPLOMA | 152 | 2.0% | 12.5% | 2.6% | 53.3% | 22.4% | 2.0% | 5.3% |
| ASSOCIATE | 161 | 8.1% | 13.0% | 5.6% | 52.8% | 6.2% | 1.2% | 13.0% |
| BACCALAUREATE | 206 | 0.0% | 8.7% | 1.0% | 25.7% | 6.8% | 14.1% | 43.7% |
| GRADUATE | 35 | 80.0 | 2.9% | 0.0% | 14.3% | 14.3% | 31.4% | 37.1% |
| TOTAL | 654 | 20 | 87 | 25 | 254 | 89 | 4.5 | 134 |

Chi-square=290.6, df=24, p<.01

There is a significant relationship between the type of nursing education program in which a nurse is teaching and current enrollment of the nurse. Of the diploma and associate degree educators enrolled in educational programs, slightly more than half are enrolled in nursing master's degree programs. Of the baccalaureate and graduate educators enrolled, more than half are enrolled in doctoral programs.

Baccalaureate nursing educators account for 67.2% of the nursing educators enrolled in non-nursing doctoral programs and 64.4% of those enrolled in nursing doctoral programs. Diploma educators account for 31.9% of those nursing educators enrolled in nursing master's degree programs and 38.2% of those enrolled in non-nursing master's degree programs while accounting for 12.7% of those enrolled in doctoral programs. One-third of the nursing educators enrolled in nursing master's degree programs are associate degree educators who also account for 38.2% of the nursing educators enrolled in non-nursing master's degree programs and 36.0% of those is non-nursing baccalaureate programs. Practical nursing educators account for 40.0% of the nursing educators enrolled in non-nursing baccalaureate programs and 32.2% of those enrolled in nursing baccalaureate programs and 32.2% of

Summary and Conclusions

This study found significant relationships to exist for Illinois nurses with respect to the following: (1) sex of the nurse and basic nursing education, highest degree held and type or field of employment; (2) age of the nurse and basic nursing education, highest degree held and employment status; (3) residence and location of employment and basic nursing education, highest

degree held, current enrollment and employment status; (4) field of employment and basic nursing education and highest degree held; (5) type of nursing position held and basic nursing education, highest degree held and current enrollment; (6) practice area and basic nursing education, highest degree held and current current enrollment; and (7) type of nursing program in which teaching and highest degree held and current enrollment. The relationship between practice area and basic nursing education is not significant in HSAs 5, 9 and 10. In HSA 10, the relationship between practice area and highest degree held is not significant. Finally, the relationship between practice area and current enrollment is significant only in HSAs 3, 6/7, 8 and 11. With the majority of Illinois nurses being located in Cook and DuPage Counties, the data for this HSA, 6/7, generally reflected those for Illinois at large.

The basic nursing education is highly reflective of the types of nursing education programs available within a given area. The majority of generic baccalaureate degree nursing education programs are located north of I-80, and correspondingly, there are higher percentages of nurses with basic preparation at the baccalaureate level in that section of Illinois. In the southern section of Illinois, the majority of programs are associate degree programs, and the majority of nurses in that area have the corresponding degree as their basic nursing preparation.

Nurses employed in nursing education tend to hold advanced degrees which is a reflection of the Rules for Administration of the Illinois Nursing Act which requires a master's degree with a major in nursing for faculty in professional nursing education programs. The other group most likely to hold advanced degrees are those nurses employed in nursing administration. Doctoral degrees are seldom held and the majority of those held are not in nursing which is consistent with program availability.

This data provides a wealth of information useful in several areas. First, it provides nurse planners with information regarding what types of nurse resources are available, what is needed and where to locate the types of nurses needed to complete projects.

Second, it provides nursing educators with insight as to areas of need in nursing education. It becomes apparent that outside of the Chicago area, there is a paucity of baccalaureate degree nursing programs, particularly in the southern geographic half of the State. This coupled with national mobility studies raises a number of questions as to implementation of a baccalaureate level of entry, potential nurse shortages and other supply and demand questions.

Appendix

Counties in Health Service Areas

HSA 1 HSA 2 HSA 3 Boone Bureau Adams Carroll Fulton Brown Dekalb Henderson Calhoon JoDavies Knox Cass Lee LaSalle Christian Ogle Marshall Greene Stephenson McDonough Hancock Whiteside Peoria Jersey Winnebago Putnam Logan Stark Macoupin Tazewell Mason Warren Menard Woodford Montgomery

> Morgan Pike

Sangamon Schuyler Scott

HSA 4 HSA 5 HSA 6/7 Champaign Alexander Cook Clark Bond DuPage Coles Clay Cumberland Crawford Dewitt Edwards HSA 8 Douglas Effingham Kane Edgar Fayette Lake Ford Franklin McHenry Iroquois Gallatin Livingston Hamilton Macon Hardin HSA 9 McLean Jackson Grundy Moultrie Jasper Kankakee Piatt Jefferson Kendall Shelby Johnson Will Vermillion Lawrence Marion Massac HSA 10 Perry Henry Pope Mercer Pulaski Rock Island Randolph Richland Saline HSA 11 Union Clinton Wabash Madison Washington Monroe Wayne St. Clair White

Williamson